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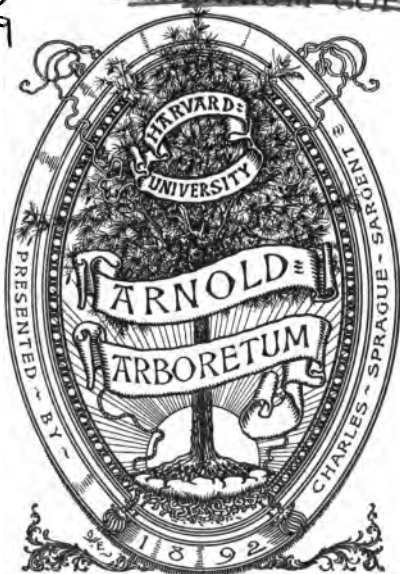
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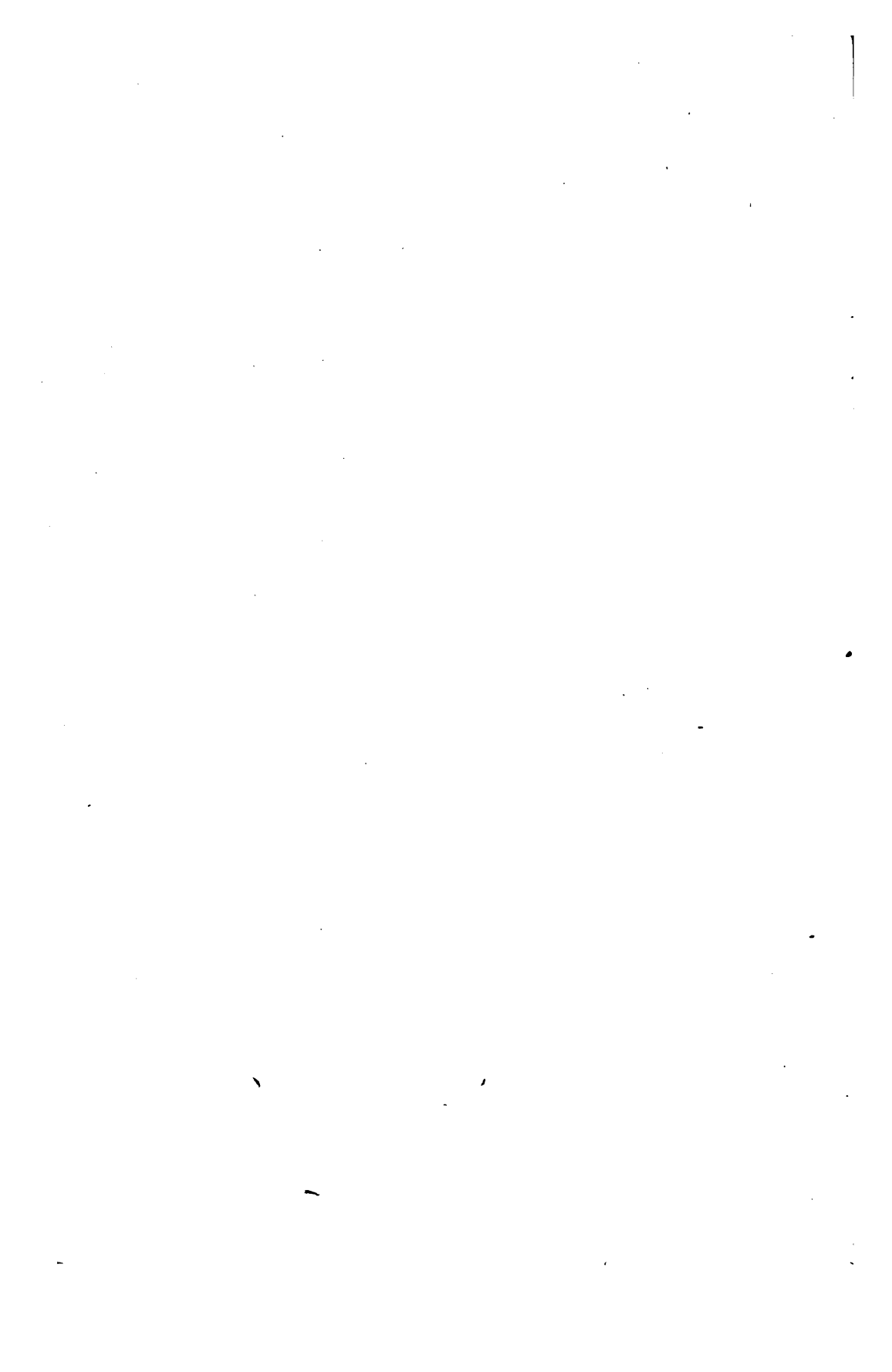
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THE CHRYSANTHEMUM

ITS

HISTORY, CULTURE, CLASSIFICATION,
AND NOMENCLATURE.

BY

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PREFACE.

To cultivators of the "Autumn" or "Winter Queen," this little book on a now popular flower is offered with all a *Chrysanthemum* grower's sympathy. Our favourite flower is everywhere at home; even the cottage wall or porch may possess a little of the beauty it reflects from the conservatories of the rich, since of all flowers this one seems to be most amenable to the cultural care of rich and poor alike. It is the only hardy flower which can brave the November fogs of our metropolis, and "gild the shadows of a waning year" with its blossoms. No other late autumnal flowering plant is so useful, none other so grateful for the shelter of a glass roof, a window pane even, and its flowers seem the caresses of a dying year. Their beauty is all the more appreciated because tinged with a shade of sadness, and because they come to us as the last sheaf of a whole year's flower harvest. And when they leave us we are not without hope for the floral offerings of a happy new year.

F. W. B.

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THE GOLD FLOWER.

CHAPTER I.

INTRODUCTION.

THE Chrysanthemum is, of all flowers, one of the most effective, and its many good qualities recommend it to cultivators of every grade. It is robust, hardy, easily increased by cuttings and seeds, varied in form, colour, and even in fragrance, and it blooms naturally at a season when other flowers are proverbially scarce. So strikingly effective are its blooms, that they are equally well suited for exhibition stands or as cut flowers for the drawing-room, and so also the plant is amenable to severe and formal training into "specimen" shape; or it may be, as we think, more wisely allowed to assume its natural habit of growth, and so become especially well suited for greenhouse and conservatory, or even room and window decoration. During the past year or two especial attention has been paid to the culture and selection of the early summer blooming, as also to the very late blooming, varieties of the Japanese and incurved types, so that now we may count on having Chrysanthemums in bloom from July until nearly the end of February, a period of at least seven months. We have but few other garden flowers so valuable for all purposes, and still fewer that may fairly be called an everybody's plant. It is as well fitted for the cottage garden, for a sunny corner beside the porch, as for the marble-floored conservatory. Every cottager, every artisan may grow it to perfection with but little trouble or expense. Oh! that you men of Lancashire, born gardeners and florists by nature as you are, would but take up the Chrysanthemum in the same earnest spirit as that which prompted you to take up the Auricula, the Onion, and Leek, the big Gooseberry, and the Celery as objects worthy of your cultural devotion and skill. Would that "merry Sherwood" men ("Nottingham lambs," if you like) could be induced to make the Chrysanthemum their winter queen, even as they have long enthroned fair Rosa as their summer one. We look to the artisans of Coventry—the city of art weaving—and to the flower-loving people of Norwich; these are the men into whose hands we would fain trust our favourite. Beautiful as the Chrysanthemum now is, there yet remains open a wide field for improvement. The summer blooming or early flowered section lacks size and form as yet, and vivid colour and fragrance may be still further increased even among the types which now possess these attributes in the highest degree. In some cases grafting weakly rooting kinds upon robust growers as stocks may be practised with advantage, and

THE QUESTION OF SEED SAVING in our own climate is as yet far from being exhausted. Under good treatment the finest of home-saved seed

may be produced in a properly constructed house fully exposed to spring and early summer sunshine, and heated with a flue, the latter being preferable in this case to hot-water pipes. Home growers have been too lethargic in the matter of seed saving, and yet no other cultivators could possibly beat them in this field if a beginning be once made on proper and well defined lines. If we could but once induce people to raise seedlings as well as grow beautiful blooms, we should be on a fair road towards enhancing colour and probably emphasising that fragrance which a few kinds possess. We must not be too restricted in our ideas as to what are and what are not good kinds. Instead of trying to limit varieties to one or two standards of perfection, our object should rather be the extending of the boundary lines of variation. All tastes must be consulted. The florist or exhibition grower must have his incurved Anemone, Japanese, and Pompon varieties, but the artist must also have his bits of twisted fringe and glints of colour in tassel and frill of varied kinds. The botanist, too, must have structural peculiarities and forms of floret the most varied and distinct. Even the æsthetics must have their whims gratified with single or Daisy-like blooms, for it is not wise to restrict our admiration to those kinds in which reduplication of florets is the rule, and it is in the direction of single-flowered kinds that we are likely to gain most in vivid colouring, beautiful alike for artistic and decorative uses. I am firmly convinced that if raisers of seedlings will but widen their sympathies, and not throw away their single-flowered seedlings, as they hitherto have done, we shall soon be surprised at the immense variety of type and form and colour which raisers may produce. We have hitherto worked in narrow grooves, and the immense capacity for variation of which the Chrysanthemum is possessed has as yet been scarcely dreamed of, even by those of us who are most sanguine. As tending towards the desired increase in that direction, which in this, as in other cases, may become most charming, I most earnestly counsel all growers of the Chrysanthemum to raise a few seedlings every year, even if it be from imported seeds. The raising of seedlings is said to be the "poetry of gardening," and if this be so, then it was never more true than in the case of the popular flower now under notice. But the heyday of all that beauty and variety of which the Chrysanthemum is by nature and art capable will, I feel persuaded, only come to us as the result of patience and labour in the growth and culture of the produce of home-saved seeds—the results of our own ideas and desires rather than in the growth of plants from seeds saved abroad, as is now supposed to be best. Another important point as regards seed saving, and one on which too much stress cannot well be laid, is that cross-fertilisation has been but rarely resorted to, too much reliance having hitherto been placed upon inherent tendency towards natural variation.

CHAPTER II.

HISTORY OF THE CHRYSANTHEMUM.

OF all flowers that which has been said to represent "cheerfulness under adversity"—the Chrysanthemum, or "Golden Flower" of the Greek—may fairly be called the "queen of autumn," six varieties of which were described by Breynius as being cultivated in Holland two centuries ago. Originally introduced to England from the Celestial Empire in 1754, it seems first to have been cultivated by that celebrated gardener, Miller, of Chelsea, but was soon afterwards lost by some unfortunate accident. Again introduced, this time by way of Marseilles in 1789, it reached London in 1795, and in Curtis's "Botanical Magazine" for 1796 we find a coloured figure of *Chrysanthemum sinense* (there described under the name of *C. indicum*),* the result of the second advent. Phillips, in his "Flora Historica," published in 1824, tells us that the new plant was sold at a high price soon after its introduction, but that it was not until the beginning of the nineteenth century that it attracted attention as a florist's flower. "Then," says he, "like the Roses of China, Chrysanthemums soon escaped from the conservatories of the curious, and as rapidly spread themselves over every part of the island, filling the windows of the cottagers and the parterres of the opulent with their autumnal beauties, that now vie with the China Aster in variety of colour glory."

Amongst other peculiar modes of culture resorted to by Chinese gardeners in Chrysanthemum culture is the engrafting of cuttings on to a strong-growing species of *Artemisia* (*A. indica*) as a stock. The idea of grafting is suggestive, as some of the more delicate rooting kinds might be grown by being grafted or inarched upon rooted cuttings or sucker stocks of a robust, strong-rooting character. Some may think this idea impracticable, but I know that Chinese gardeners rarely take any special trouble in plant culture without a sound reason for so doing, and cultivators at home will, I hope, leave "no stone unturned" in this respect. One reason why grafting might be useful is that by its means new sports might in all probability be obtained. Fortune tells us of the beauty of the Chrysanthemum in oriental gardens, and how banks of the gorgeous blooms are illuminated at night with lanterns, and how that even gigantic effigies are made up entirely of their lovely flowers.

Even when the Chinese emigrate to other lands, this their favourite flower is carried with them and affectionately cultivated. Here is an instance of this practice. I once went to see the late Consul Whampoa's garden at Singapore,† the entrance to which is a long bowler of the most superb tropical flowers, waving crimson-stemmed Palms, and climbing plants of great beauty. Here the "Sacred Tree of Heaven," *Amherstia*

* The figure in the "Botanical Magazine," vol. x., t. 327, represents a double bloom, with quilled florets of a maroon-purple colour inside, and of a silvery or rose-purple outside. Dr. Sharpe reflexed variety very closely resembles this figure in all ways. It is in reality the Chinese Chrysanthemum (*C. sinense*), and not *C. indicum*, which is the type of the Pompon or small-flowered race.

† Mr. Whampoa was a Chinese trader, who early in life left China and settled in Singapore. He rose to affluence, and was a C. M. G.

nobilis, bends under the weight of umbrageous leafage and pendent wreaths of the most gorgeous crimson and golden blossoms. Every pool and stream, of which there are many in this garden, are filled with the rarest of Water Lilies and Lotus flowers. After our host had shown us all this—all the tropical treasures of Kew or Glasnevin in the open air and sunshine—he led us triumphantly to a little sheltered spot and showed us, with pleasure beaming from every wrinkle of his smoothly shaven face, not Orchids of curious structures, nor Water Lily of a loveliness divine—neither Palm, nor Fern of filmy beauty—nothing more nor less than a bed of Chrysanthemums, the one flower of his heart, reminding him of home and country. That the artists and poets of China and Japan have lavished much of their finest and best thought and labour in representing this flower in all pleasant aspects to the senses is now a matter of history, attested by ceramic wares and textile fabrics of many kinds. The Japanese more especially possess voluminous illustrated works in which the Chrysanthemum, in all its phases of race and colour, is ably portrayed. The Rev. G. Henslow has well described how

THE TRANSFORMATIONS IN THE COROLLA are brought about—the two principles of hypertrophy and atrophy both conspiring to effect the remarkable changes. Thus, while the corolla enlarges, to change from a five-toothed minute disc-floret into a broad, flat-petalled ray-floret, two petals are gradually dwarfed and finally disappear; while a corresponding atrophy takes place in the essential organs, for the stamens are totally arrested, and the pistil changes its form, the style-arms becoming much reduced in size. The tubular condition of the corolla may remain while the tube itself elongates without any or much splitting—hence the quilled and tasselled forms are arrived at, both representing a more or less arrested stage in the process of change into ray-florets. The ligulate petal may be broad—which gives rise to the incurved and recurved ball-like forms; or it may be greatly elongated and narrow—whence the Japanese linear-petalled forms; or it may be expanded at the mouth, and the teeth multiplied—which gives the trumpet-like so-called Dragon Chrysanthemum. Lastly, if the disc-florets enlarge, but remain more or less tubular while the ray retains its distinctive character, the Anemone form is secured.

THE FIRST CHRYSANTHEMUM that ever flowered in England bloomed in Colville's nursery, in the King's Road, Chelsea, in 1795, the plant having been obtained originally from M. Cels, the celebrated nurseryman, of Paris. At this time, and for some little time afterwards, botanists had a contest as to its botanical position; some of them contended that it was one of the Camomiles (*Anthemis*), whilst others declared that it was unmistakably a *Pyrethrum* or Feverfew, but at last it was decided that it should be called Chrysanthemum, from *chrysos*, gold or golden, and *anthos*, a flower. Sabine, who was secretary to the Horticultural Society at the beginning of the present century, says, however, that Chrysanthemums had been grown in Holland nearly as far back as the year 1688; but, singular to say, in 1821 no gardener in Holland knew anything of them. In 1808 their cultivation had increased to some nine or ten varieties, and it went on increasing, many varieties being collected for the Royal Horticultural Society in China

and Bengal in 1821 by Mr. Parks. At the end of 1825 the number of varieties seems to have been increased to 48, and in 1826 Sabine writes most cheerily concerning their rapid progress, and of an astounding large exhibition of them being held in the society's gardens at Chiswick, in which were shown over 700 plants in pots.

THE FIRST SPORT from the original variety was noted in 1882, in which year Mr. Colville, of Chelsea, sent to Chiswick a pale pink variety, which had sprung from a sort called Changeable Buff. It is curious to note names given to some of the varieties about this time. Let one or two be given for curiosity's sake: Early Blush, Park's Small Yellow, Blush Ranunculus, Curled Blush, Tasselled Lilac, Two Coloured Red, Double White Indian, Yellow Indian, Waratah, Quilled Pink, Pale Purple. These names, which in a sense give the characteristic of some of them, seem to indicate that in what are now called the show varieties, which are largely of the strain of *Chrysanthemum sinense*, there was the same special singularities as are to be seen now, only that these idiosyncracies are positively classified. We often hear of incurved flowers, of recurved or reflexed flowers, of quilled flowers, of tasselled flowers, and of Anemone flowers, besides the Pompons and Japanese. Well, the incurved flowers are those whose flat florets curve or bend in towards the centre of the bloom; the recurved or reflexed bend backward from the centre (the recurved moderately, the reflexed more so); the quilled have the edges of their florets involute and coherent, so that they look like small pipes or tubes; the tasselled are the loose long and flat-petalled flowers not coming under the other definitions; and the Anemone flowers are those kinds having a cushion-like centre of tubular disk-florets, surrounded by a ray of flat or strap-shaped florets of the usual kind.

ORIGIN OF THE POMPONS.—In 1845 the late Mr. Robert Fortune, who was sent to China in 1842 by the Royal Horticultural Society, brought home with him from Chusan (an island on the east coast of China) a semi-double reddish or light brown small *Chrysanthemum*, which was called the Chusan Daisy. The Horticultural Society propagated it, and sent it out amongst its members. From some of these members it was sent to M. Lebois, a perfect enthusiast in *Chrysanthemum* growing, in Paris. He seeded it, the autumns of France being more favourable to that operation than the cold foggy ones of England, and from this seed he raised a great many good varieties, which got into the hands of Mr. Salter, late of the Versailles Nurseries, Hammersmith, who in his day did more to popularise *Chrysanthemums* in England than any other man. Some of the best varieties, not only of Pompons, but of the other larger varieties, were introduced by him. He had a perfect knowledge of what was being done by the French growers, and generally secured their best seedlings. This is the generally received history of the Pompon varieties of *Chrysanthemum*, though we may infer from some of the names given to them as far back as 1821 and 1825, Park's Small Yellow, Blush Ranunculus, &c., for instance, that there were small varieties grown then; indeed, in the Horticultural Society's Transactions for February, 1821, there are coloured plates of small, many-petalled varieties, though they were not called Pompons until the French got hold of them in 1845—6. In 1846 a new era commenced

in the history of the Chrysanthemum, for at that time Mr. Fortune brought from China two small-flowering varieties, the "Chusan Daisy" just named and "Chinese minimum." Although Mr. Fortune admired them in Chusan, they were considered too small and insignificant for English tastes. The French opinion of them was far different, for immediately upon their introduction, in 1847, into the already well-known collection at Versailles, the little "Chusan Daisy" became a favourite. From these two varieties have sprung all the Pompons now in cultivation. The French growers gave them this name, Pompon, from the resemblance of the flower to the tuft or pompon on the soldiers' caps.

JAPANESE KINDS.—These were brought over by Mr. Fortune on a second visit to Japan about the year 1859 or 1860. The precise date is uncertain, but at least one variety was figured in the *Botanical Magazine* as somewhat of a novelty in 1863, so it must be about the time mentioned that they were introduced. The French and Guernsey growers soon got hold of them, and have improved them immensely. They are with some growers greater favourites than either of the other two older varieties. In 1862 Mr. Salter introduced several Japanese varieties, some of which were spotted and striped; others were of fantastic forms called Dragons, and one, laciniatum, was a beautifully fringed white flower, and invaluable for bouquets, having the appearance of a Japanese Pink rather than of a Chrysanthemum. One had petals like long thick hairs of a red colour, but tipped with yellow, looking like the fringe of a shawl or curtain; another had broad white petals striped with red, like a Carnation or Camellia, whilst others were remarkable for their great size and brilliant colouring.

SHOW CHRYSANTHEMUMS.—In 1850 we find the Chrysanthemum taking rank as a winter exhibition plant at the meetings of the Caledonian Horticultural Society, which at that time held its shows in what is now the Royal Botanical Gardens, Inverleith. Here we are told that "Chrysanthemums were the principal flowers exhibited. The prizes for single clusters of twelve varieties were awarded to Mr. Young, gardener to Mrs. H. N. Ferguson, of Archerfield, who had Minerva, Duc de Nemours, General Morceau, Salter's Annie, Queen of Yellows, Princess Maria, Clustered Yellow, Queen Victoria, Comte de Rantzau, Bicolor, Queen, and Marquis; and to Mr. Mitchell, for Temple of Solomon, Princess Marie Antoinette, Celestial, Queen, Salter's Annie, and others. For the most dwarf and finest-flowered plants, the prize was awarded to Mr. A. Sleigh, gardener to the Lord Advocate, Lauriston Castle, the kinds being Bicolor, Queen, Mirabile, and David." I give the extract as it stands from the *Gardener's Magazine of Botany* (1850), as not only are the names of the varieties interesting, but also the custom which then was followed of showing the flowers in single clusters (i.e., all the blossoms as produced on one stem) instead of single blossoms as now.

BRITISH KINDS.—So popular are the Chrysanthemums of China and Japan, that one almost forgets that there are other species. "Charity begins at home," and so we must not lose sight of the two Chrysanthemums of our own country commonly known as the Ox-eye Daisy (*C. leucanthemum*) and the Corn Marigold (*C. segetum*). Who can say what the Ox-eye of our meadows would produce in a few years if it were



Single-flowered Chrysanthemum, *Etoile d'Or*.

cultivated from seed with a little of that faith and persistence so characteristic of the Chinese gardeners? Even our golden Corn Marigold has been neglected, although in its native state it is one of the brightest and best of all annual Composites. Its Algerian relative (*C. coronarium*) has met a better fate, and we have now many varieties both single and double in our gardens. The same may be said of *C. carinatum*, which is likewise a very beautiful annual, although the Chinese use it as a pot herb, just as their Japanese cousins eat up the succulent bulbs of *Lilium auratum*, thinking more of their use than of their beauty. *C. arcticum*, *C. speciosum*, *C. lacustre*, and *C. atratum* are all well-known hardy species, the last named being a more noble and stately edition of the Ox-eye of our meadows. Of all the late-blooming, hardy herbaceous kinds, however, *C. (Pyrethrum) serotinum*, also known as *C. uliginosum*, is one of the most effective, producing its green-eyed stars in October or later, continuing in beauty until cut down by the early frosts of November. The shrubby *C. frutescens*, better known as the Marguerite or the Paris Daisy, has of late years become almost as great a favourite in English gardens as it has long been in those of the Continent. There are several varieties, *C. tanacetifolium* being one of the best white-rayed kinds, and *C. Etoile d'Or*, a seedling from *C. Comte de Chambord*, is the best of the sulphur-rayed varieties. All are beautiful planted out in the open borders in May, or as grown in pots in a sunny greenhouse. They bloom throughout the winter months, when their flowers are especially valuable. *C. coronarium*, *C. carinatum*, *C. Burridgeanum*, and other annual species are easily raised from seeds sown in spring like Mignonette, Stocks, or other hardy annuals. The herbaceous kinds, *C. lacustre* (syn., *C. maximum*), *C. uliginosum*, and others, are best increased by division in the spring or early summer months. *C. frutescens* and other allied sub-shrubby kinds are easily propagated from cuttings.

It is interesting to find that the Siamese have adopted the Chrysanthemum as their national emblem. Breynius in 1689 described it as *Matricaria japonica maxima*, from which name we may infer that the earliest known large flowering kinds came originally from Japan, especially so as he speaks of yellow, white, blush, purple, rose, and crimson varieties. Linnæus in 1753 referred to two species, *C. sinense*, with large white flowers, and *C. indicum*, with very small yellow blossoms, both double and single.* The Dutch florists seem to have been the first to cultivate *C. indicum* (Pompon) which had found its way to Amboyna and Malabar. Rheede figures it as early as 1699. Kæmpfer noticed it in 1712, and Thunberg describes it (also as *Matricaria*) in 1784.

Mr. Fortune told us long ago that the Chinese made life-sized images of their blossoms, but who would suspect the "moon-faced celestial" of liquor. And yet we are told that "in China a liquor is distilled from the flowers of the Chrysanthemum, which is regarded as an elixir-vitæ, and in the Chinese pharmacopœa a powder of the flowers or florets dried is prescribed as a cure for drunkenness."

* It is curious to note that single flowered Pompons after having been lost sight of for over a century are again coming into favour. Of such is New Departure, as now grown by Messrs. Cannell, with white ray florets and a golden disc. (See *Garden*, Jan. 6, 1883, p. 8.)

CHAPTER III.

CLASSIFICATION AND NOMENCLATURE.

LARGE-FLOWERED CHRYSANTHEMUMS.—The credit of introducing the first living plants of the large-flowered or *C. sinense* race (1789) belong to M. Blanchard, an enterprising merchant of Marseilles. The consignment consisted of three varieties, white, violet, and purple, the latter only reaching him alive. This identical variety is so well figured in the *Botanical Magazine*, t. 327, that we have no doubt as to its identity. It was not the wild type, but one of the many semi-double forms at that time cultivated in Chinese gardens. This kind caused such a sensation, that Sir A. Hume and Mr. John Reeves, a tea buyer for the then opulent East India Company, turned their attention to introducing other of the Chinese varieties. These, according to Mr. Salter, were as follows: In 1798 the Rose and Buff-coloured varieties were introduced; in 1802 the Golden Yellow, Sulphur Yellow, and Quilled Pink; in 1806 the Spanish Brown; in 1808 Large Lilac and Quilled White; in 1816 the Tasselled White; 1817 the Superb White; 1819 the Red, Purple, and Flamed Yellow. In 1820 only twelve distinct varieties were known in England. In 1821, however, came the Paper White, Large Pale Purple, and Small Single Yellow; this last possibly may have been the one grown at Chelsea in 1764. In 1822 came the Early Crimson, a semi-double flower with open flat florets in size and form like Marigold, and one or two others. In 1824 Mr. Parks, a collector for the Royal Horticultural Society, sent home about twenty kinds—the Brown Purple, Blush Ranunculus, Curled Blush, Changeable Buff, Clustered Pink, Early Blush, Golden Lotus, Late-flowering Yellow, Pale Pink, Pale Buff, Parks' Yellow, Quilled Pale Orange, Starry Purple, Tasselled Yellow, Two-coloured Incurved, Two-coloured Red, Windsor Yellow, and Yellow Waratah, the first of the Anemone section, both ray and disc being yellow. In 1826 forty-eight varieties were growing in the Horticultural Gardens at Chiswick, only fifteen varieties being known in France in 1822.

In 1850 Mr. Salter tells us that the varieties usually seen on exhibition stands were: Annie Salter, Beauty, Bixio, Christine, Campistroni, Defiance, Duke, Golden Chester, Goliath, King, Lysias, Mad. Comerson, Mad. Poggi, Nonpareil, Orlando, Pearl, Pilot, Phidias, Princess Marie, Queen of England, Temple of Solomon, Vesta, and Two-coloured Incurved. Most of these were grown in 1865, but as numbers of growers increased great improvement took place, not only in England, but in France and the Channel Islands. In Guernsey, Messrs. Clark, Smith, Pethers, Wolsey, and Davis raised many good kinds, including Sir S. Carey, Abbé Passaglia, Beverley, General Bainbrigge, Lady Hardinge, Lady Slade, Prince Alfred, Novelty, Cherub, Little Harry, Rifleman, and many others. Mr. Ingram, of Frogmore, raised several good kinds, Pompon Little Gem, a late-flowering kind, being good in colour and form. Mr. Salter, writing in 1865, says that only six or seven of the varieties originally introduced were then in cultivation, and only one Chinese name was retained, viz., Golden Lotus—some of these native names being, as he informs us, curious and

interesting, such as White Waves of Autumn, Purple Pheasant's Tail, Gold Thread (a name more recently applied to one of the Japanese varieties), Purple Butterfly, Crystal White, and Yellow Tiger's Claw.

In 1830 seedlings were first raised in France, the produce being remarkable for variability, much to the delight of the amateurs of Toulouse and Avignon, who now began to christen their seedlings after their national celebrities. Chevalier Bernet, of Toulouse, raised the first European seedlings, some of these being, as Mr. Salter tells us, still (1865) highly prized. Among these were Christine (Ne Plus Ultra), Chevalier Domage, Maréchal Duroc, and Insigne. Other growers followed, such as MM. Boisgiraud, Regnier, Rantonet, and, at a later date, MM. Bonamy, Pelé, and Lebois.

THE FIRST ENGLISH SEEDLINGS were raised in or about * 1830 by Mr. Isaac Wheeler, gardener and porter at Magdalen Hall (now Hertford College), Oxford. These he reared from home-saved seeds at Beaumont Buildings, in that city, and on December 2, 1832, he exhibited some of his seedlings in London, and received a silver Banksian medal for them as the earliest seedling Chrysanthemums raised in England. This medal, and also a drawing of one of the plants, may yet be seen, being in the possession of a member of the Wheeler family still resident in Oxford. Other seedling varieties were raised in Norfolk by Mr. Short and Mr. Freestone about the year 1835, Nonpareil, Norfolk Hero, and Prince of Wales, with others, being the pioneers.

About 1836 seedling Chrysanthemums were produced in the Channel Islands for the first time, and a great improvement began to be effected among large-flowered varieties. Many of these early Channel Island varieties were obtained by Mr. Chandler, then of the Vauxhall Nursery. Beauty, formosum, and lucidum were really good show kinds. In 1838 Mr. Salter settled at Versailles, and, finding the climate suitable, imported many of the best known varieties from England, and set about their further improvement. In 1840 his collection of English, French, and Jersey seedlings amounted to between 300 and 400 distinct kinds. In 1843 seedlings began to be raised in the nursery at Versailles, and some of the results are given by Mr. Salter himself as follow: In 1844 Annie Salter, Mad. Poggi, and Queen of Yellows; in 1846 Fleur de Marie, Cyclops, and Nancy de Sermet; in 1847 came Queen of England, one of the best of white kinds for cut blooms.

The first public Chrysanthemum show for cut blooms was held at Stoke Newington in 1846. To Mr. Fortune, as has been stated, we are indebted for the original Pompon from China, namely, Chusan Daisy and Chinese or Omnium minimum. These were introduced in 1846, and thence dates a new era in Chrysanthemum culture so far as this section goes. In the "Gardeners' Magazine of Botany" for 1850 we find many varieties of these French Daisy kinds described, and four sorts are represented in a coloured plate.

* Salter, at p. 9 of "The Chrysanthemum," says: "In 1830 seed was first saved in the south of France."

MODERN JAPANESE VARIETIES.—Both the large-flowered and Pompon varieties were largely grown and much improved up to 1862, when again Mr. Fortune introduced a new strain in the shape of seven varieties from Japan. So singular were these in shape and colour from all reputed standards of perfection at the time, that they barely escaped total neglect, and consequent extinction. At the present day, however, these once neglected kinds stand in the first rank as decorative plants, and finer and still finer varieties make their appearance every year raised by Major Carey and others in the Channel Islands and on the Continent. Mr. Salter in 1865 lamented that some of the best original Chinese tasselled kinds were wholly lost. Of those then grown, however, he mentions Golden Lotus, Quilled Pink, Tasselled White, Tasselled Yellow, Two-coloured Incurved, and Yellow Waratah. Where are these kinds now? Lost, no doubt, in the race after novelty. One Japanese kind which Mr. Fortune tried to bring home was unfortunately lost on the way. This had its florets edged very beautifully with a hair-like fringe. Writing from a florist's point of view in 1865, Mr. Salter says: "The form of the flower has become so beautiful, that it seems scarcely possible any amount of cultivation can improve it, but both size and colour may be augmented."

It is true that we have many fine selfs white, yellow, orange, rose, and crimson, but violet and scarlet are at present unknown. There are but few edged, mottled, striped, or tipped varieties. Now, to-day we have, however, form more perfect in Mrs. G. Rundle; colour more vivid in Progne, Crimson Velvet, and others; and size has been considerably augmented by improved methods of culture, if not also by actual seminal variation. In the modern Japanese varieties we have form and colour of the most beautiful, and also another valuable quality, many of them blooming a month later than the other kinds, and so we can extend the Chrysanthemum season by their aid. Early blooming races of large-flowered, and also of Japanese, varieties are now desiderata, and we yet live in hopes of seeing the Chrysanthemum in all its forms thus rendered amenable to sure and certain open-air culture in our climate.

A blue Rose may be an impossibility, but we are told that a variety of the Chrysanthemum exists in Japan with blue flowers. It is represented very frequently on Japanese porcelain, both ancient and modern, especially that of Satsuma and Kioto; it also appears on *cloisonné* enamels and embroidery. In the "History of Nin-toku-ten-wau" the following passage occurs: "In 386, in the seventy-third year of his reign, seeds of the Chrysanthemum were first introduced into Japan from a foreign country, both blue, yellow, red, white, and violet." The Japanese commentator remarks: "By a foreign country is meant the kingdom of Paik-tse, one of the states of Corea." In the palace of the Mikado, at Kioto, is an apartment decorated entirely with paintings and carvings representing this popular Japanese flower.

CHAPTER IV.

RACES OR SECTIONS.

IN order to give a clear idea of the cultivated races of the *Chrysanthemum* now popular in our gardens, we have tabulated them according to their distinguishing characteristics. Of course it must be understood that these distinctions of race are of an arbitrary character. Some of the races, especially the Incurved, Reflexed, Pompon, and Japanese, have become more or less blended by the efforts of the cultivator and raiser of new seedlings; thus we have sub-races in the hybrid Japanese kinds, of which Elaine, Peter the Great, and Ethel are examples. The varieties of Cedo Nulli unite the Pompon with the small-flowered Anemone race, and there are hybrid Pompons with reflexed florets and large flowers, such as Trevenna, Aurore Boreale, and Sœur Melanie. Such also are some sorts among the early blooming Pompons. A variety called Garnet seems to be a forerunner of a sub-race of Japanese Anemone-flowered *Chrysanthemums*. Progne (Reflexed) and Japanese Violet (Japanese) also are welcome as varieties having a distinct and really appreciable fragrance or Violet-like perfume; thus another charm is now added to this already popular flower. For all practical purposes, however, the following arrangement of races may stand as it is written:—

RACE I.—*Incurved or Ranunculus-flowered, generally known as show or exhibition kinds.*—The florets are strap-shaped, curving inwards, so that in the most full and perfect blooms the backs of the florets only are seen. Examples: Mrs. Rundle, Alfred Salter, General Bainbrigge, King of Denmark, Lady Slade, &c. (See illustration.)

RACE II.—*Recurved or Reflexed-flowered.*—Plants mostly of excellent habit of growth, and so good for specimens. Florets strap-shaped, but curving outwards from the centre, so that the inner surface of the florets only is exposed. Examples: Annie Salter, Progne, Golden Christine, Dr. Sharpe, &c. The inner face of the florets being fully exposed in all reflexed flowers, it naturally follows that the varieties of this group are most remarkable for deep and vivid colouring.

RACE III.—*Anemone or Quilled Aster-flowered.*—The varieties of this race have an outer circle of strap-shaped florets, only the disc or centre of the flower being raised cushion-like and made up of closely arranged tubular florets. Examples: *Large-flowered Anemones*—Fleur de Marie, Glück, King of Anemones, &c. *Small-flowered or Anemone Pompons*—Marie Stuart, Madame Montels, Calliope.

RACE IV.—*Pompon small reflexed or Chusan Daisy-flowered.*—The plants of this race have an excellent twiggy or bushy habit of growth, and produce numerous small button-like flowers for the most part having reflexed florets. Examples: Bob, Snowdrop, Mdme. Marthé, General Canrobert, &c. Some varieties of this class have florets fringed or toothed at their tips. Examples: Marabout, Innocence, fimbriatum, Princess Meletia, &c. These are often known as fringed or fimbriated Pompons, and the large flowered kinds are sometimes called hybrid Pompons,



Incurved Chrysanthemum Queen of England (blush white). (See page 12.)

being intermediate in size and character between the typical Chusan Daisy or Pompon proper and Race II. or large-flowered Reflexed kinds. Example: Trevenna and its varieties.

RACE V.—*Quilled or Pin-feathered Japanese*.—This race is characterised by plants naturally rather tall and straggling in habit. Flowers very large, 6 inches to 9 inches in diameter, when the main shoots only



Anemone-flowered Chrysanthemum Madame Montels (disc florets yellow, ray florets peach-rose). (See page 12.)

are strongly grown. All the florets are involute and tubular or quill-like for four-fifths of their entire length, their tips being dentate or toothed. Example: Meg Merrilies, Sultan.

RACE VI.—*Japanese or Tassel-flowered*.—Plants of tall and robust habit, requiring exceptional good culture in order to obtain large blooms. Flowers rather loose, composed of long, flat, or narrow strap-shaped florets. Modern examples: Elaine, Ethel, Fair Maid of Guernsey, Oracle, Peter

the Great, James Salter, all with strap-shaped petals, tolerably flat or uncontorted. Tokio, Gold Thread, Bronze Dragon, Dr. Masters, and others have florets revolute, twisted, and thread-like, but not really quilled or tubular, although apparently so at first sight. Some Japanese varieties have tubular florets—Rob Roy, for example—and serve as the connecting link between the Races V. and VI.

When in Japan, the late Mr. Fortune sent to this country seven remarkable Chrysanthemums, which proved exceedingly distinct in size, form, and



Pompon Chrysanthemum (spray of flowers, reduced). (See page 12.)

colour from the ordinary kinds grown here. From the types then introduced have been raised kinds still more remarkable for diversity, possessing either enormous size, peculiarity of form, or novelty of colour. Although of a distinct type from the Chrysanthemums in general cultivation, no difference in treatment or soil is necessary to secure a succession of flowers from November until January or February. Many of them remain longer in bloom and bloom later than the Chinese kinds, so that we may have our greenhouses gay with them all through the dull winter months when flowers are scarce. The effect produced in the conservatory

by their fantastic forms and brilliant colours is most novel and pleasing, many of their immense blooms having more the appearance of tassels formed of the gay plumage of tropical birds than of flowers. These original varieties were japonicum, Bronze Dragon, roseum, punctatum, striatum, laciniatum grandiflorum, and Yellow Dragon. Concerning these Mr. Fortune gave us some interesting information. He obtained several kinds from Japanese gardeners, which he brought over to Shanghai, where he left them in the charge of a Chinese gardener while he went northward to Peking. On his return he found that many of the roots he had collected were dead, and that only a few remained, some of which were imported safely into England. Of these two or three kinds only fell into the hands of Mr. Salter, of Hammersmith; but from seeds of these two or three seedlings were produced, which yielded flowers not only differing from those of the parent plant, but identical with those which Mr. Fortune had collected in Japan, and which were lost in China. This could be no case of hybridisation, for no flowers of the kind had been previously seen in Europe. It was a case of pure seminal variation.

It has been proposed to class Japanese Chrysanthemums into three divisions as follows: Ribbon varieties, Twisted varieties, and Thread varieties. The first or Ribbon varieties would comprise those of which the florets are reflexed and droop below the calyx—namely, Meg Merrilies, Baronne de Prailly, Fulgore, Gloire de Toulouse, Triomphe du Nord, Fulton, Elaine, Madame C. Audiguier, Arlequin, Rosa Bonheur, Triomphe du Châtelet, and others. The second or Twisted varieties would include Yellow Dragon, grandiflorum, Hero of Magdala, James Salter, Chang, &c. Thirdly, the Thread varieties would be such as Cossack, Gold Thread, and Madame Godelet. Then we have many of our best varieties with their florets erect or partly so—namely, Sarnia, Ethel, Fair Maid of Guernsey, Peter the Great, Daimio, Madame Lemoine, Jane Salter, Soleil Levant, erectum superbum, Oracle, Diamond, M. Maney, La Nuit, Bouquet Nationale, and others. The beauty of the Japanese consists in their great diversity of colour and form. There are two varieties of Japanese, or rather now classed as such, which might with advantage be added to the large Anemone-flowered sorts—namely, Duchess of Edinburgh and a variety named Minnie Chate. The former has pure white guard florets with a pretty mauve centre; the latter has lilac guard florets with lilac centre.

A new classification is certainly desirable for the now numerous and handsome Japanese varieties, but it is necessary that such classification should rest, if it be possible, on sound structural ground, and not upon mere external appearances. The three sections just proposed scarcely allow of scope for future improvement, nor does it comprehend all the structural differences as displayed by the kinds as already distributed. A noted raiser sent me some very fine seedling blooms this season, and much as I had known and expected of the Japanese Chrysanthemums, I never even dreamed that such changes could so quickly and surely be wrought in this beautiful class. Anemone-flowered Japanese as large as tea-saucers, and of all colours from white to crimson-scarlet and purple through all the shades of sulphur, primrose, buff, yellow, and red, are surely enough to make a grower's "mouth water." Several of my friends are taking Mr.



Japanese Chrysanthemum James Salter. (See page 15.)

Forsyth's advice, given as long ago as 1872, and are saving seed from good varieties of large-flowered and Japanese varieties. Both Mr. W. Thompson, of Ipswich, and Mr. Benary, of Erfurt, offer Chrysanthemum seed of the various sections for sale. Florists are a little too apt to have set ideas, and quite right they are in adhering to them (from their own standpoint), but what I and many other lovers of the Chrysanthemum desire are some of the lovely single-flowered seedlings which the florist persistently throws away should they appear among his seedling plants. Now that single Dahlias and Pyrethrums of the *P. roseum* section are so popular for their brilliant colours, is it not desirable that some of us should have single-flowered Chrysanthemums of Daisy-like form and good distinct colours as brilliant as it may be possible for us to obtain? I submit the following as an example of the classification required in the Japanese section:—

SECTION I.—Florets strap-shaped for more than half their entire length; (a) florets erect, displaying almost as much of the colouring of the back part as of the front. *Ethel, erectum superbum, Oracle, Peter the Great, &c.*; (b) florets reflexed, showing front colouring most. *Elaine, Beauté du Nord, &c.*; (c) florets twisted, curled, or variously contrasted, showing both back and front colouring of the florets in a more or less irregular manner. *Cossack, Gold Thread, Tokio.*

SECTION 2.—Florets quilled or tubular for more than half their entire length; (a) florets curving upwards or erect. *Soleil Levant, Red Dragon, Meg Merrillies*; (b) florets reflexed.

SECTION 3.—Florets of the disc tubular, densely packed in a raised cushion-like mass. Florets of the ray flat, slightly recurved. Popularly known as Japanese Anemone-flowered. *Garnet* and one or two others afford good examples of flowers in this section.

Speaking of the Japanese varieties in 1881, Mr. Henry Cannell, of Swanley, writes as follows concerning their distinctness and beauty:—

"These are very novel and striking in appearance, and perfectly distinct from the ordinary kinds of Chrysanthemums; most of the varieties do not fully develop their flowers until Christmas, and are therefore valuable on that account. They are useless for small specimen plants, as their habit is long, and they require to be treated similar to the incurved varieties, that is to say, to let the plant grow upright. They must have good cultivation, and as soon as the flower buds appear they must be reduced to one on each shoot and grown very strongly, otherwise they will possess no beauty. If damp is kept from them they will continue in bloom a long time."

From the *Gardeners' Chronicle* we learn that the Japanese varieties were not introduced into England until 1862, but Mr. Crawford (H.M. Consul at Oporto) tells us that the Japan varieties had long been cultivated in Portugal before their introduction into this country. The origin of the different races is due to the different degrees of development of the individual flowers or florets. We must divest ourselves of the popular idea of the Chrysanthemum bloom being an individual flower, and look upon it as a flower-head or capitulum consisting of from one to two hundred or more separate individual little flowers. In the wild plant we get the Daisy-like flower, the ray florets having irregular strap-shaped corollas, and the disc

(or "eye") florets have regular 5-toothed ones. Mr. Henslow thus points out the various changes. "I. To strap-shaped, becoming flattened from base to tip. (1) Rolled inwards; (2) rolled outwards; (3) loose and spreading; (4) do., but much attenuated, pointed, or bifurcated. II. The tube retained. (1) Short, with five slightly enlarged teeth (Anemone); (2) teeth much enlarged and multiplied (Dragon); (3) tube elongated with no teeth (quilled); (4) quilled, but open or spoon-shaped at the end (as in Emperor of China)."

RACE VII.—*Early-flowering Pompons and hybrid Pompons*.—A valuable modern race of Continental origin consisting of plants of bushy habit, bearing a profusion of reflexed and Pompon-like flowers. When well established on open-air borders and on warm soils they commence flowering in August, and continue in bloom until the severe frosts of November or December. They form valuable early autumnal decorative plants when grown in pots. Examples: St. Mary,* Fred. Pelé, Illustration, Précocité, Gold Button, &c. It is by many erroneously supposed that the early-flowering or summer Chrysanthemums are of recent origin. The following extract is from the "Gardeners' Magazine of Botany" for 1850, and shows that even thirty years ago a start was actually made, and hopes entertained which are realised only as it were to-day: "M. Pelé, a distinguished horticulturist of Paris, has also obtained many varieties, the most interesting of which is called Madame Pépin, and which flowers constantly about a month before the others. It is probable that this new type will furnish other varieties as early, which will impart a novel and important quality to Chrysanthemums."

RACE VIII.—*Single-flowered Pompons or Indian*. Example: New Departure (Cannell), and many other kinds.

RACE IX.—*Single-flowered Chinese or large-flowered*. The large-flowered Anemone varieties are semi-single forms of *C. sinensis*, just as the small-flowered forms of Anemone kinds are semi-single Pompons.

RACE X.—*Single-flowered Japanese*. Example: John Rae (Burbidge). A single Daisy-like flower, with slender bronzy ray florets, raised in 1882 in the College Gardens, Dublin. Tisiphone (Salter) is a good single red, figured in the *Garden*, 1883.

THE POINTS OF PERFECTION, as set forth by the late † Mr. George Glenny in his remarks on the Chrysanthemum, are the following: 1. The plant should be dwarf, shrubby, well covered with green foliage to the bottom, the leaves broad and bright, the flowers well displayed at the end of each branch, produced in abundant quantity, and well supported by the stems. 2. The flower should be round, double, high in the crown, perfect in the centre, without disc or confusion, and of the form of half a ball. 3. The individual petals should be thick, smooth, broad, circular at the ends, according with the circle of the flower, the indentations where they meet hardly perceptible. 4. The petals must not show their undersides by quilling, and should be of such firm texture as will retain them in their

* St. Mary (Cannell) is the same as Souvenir d'un Ami (Ware).

† It is only fair to Mr. Glenny's memory to say that at the time he wrote this quotation the lovely varieties of the Japanese race had not been introduced.

places. 5. Size of bloom to be large in proportion to the foliage, but the size only to be considered when plants are in all other respects equal.

The canons here laid down agree with the ideas of modern florists so far as exhibition varieties are concerned, but there are artistic and tasteful people of all kinds to please, and now-a-days all the varieties of the Chrysanthemum have their admirers.

PROPERTIES OF THE CHRYSANTHEMUM.—It is a curious circumstance in the character of the Chrysanthemum that, however nearly some of the flowers may approach the general form required, there are scarcely two of the same construction. One globular flower is formed of long petals reflexing, another by a succession of cupped petals, one row above another to the centre; a third may be formed by a mass of incurved petals, whose spoon-like ends, showing the backs only, curl over and form an almost solid surface by their closeness; others again have petals broad and flat, but towering one above another, forming a fine symmetrical flower to the centre; and we have only spoken now of the varieties fit to show because of their approach to the desirable form of half a ball. But for those who grow a general collection for the sake of variety in form and colour, there are many more forms—some throwing out their quill-like petals like so many diverging rays, and scarcely opening even the ends of these quills at all; others again have quilled petals, but open at the ends, showing a broad surface of the inner side; then some have long ragged tassel-like flowers in the form of a loose mop—but the most fanciful of these varied forms, and perhaps the prettiest of all, is that of a round disc formed with broad flat petals, and a globular mass of quilled florets nearly filling it. It is this variety of construction running through the whole family that perplexes the judges at a show; but they should look to the main point first; no matter what the construction, whichever flower makes up the best and closest half of a globe is the best flower, while those which are open and loose are the worst.

THE PROPERTIES OF THE POMPON varieties do not vary much from those of the larger family; but as their diminutive size is their chief distinction, it is the more necessary that they should be compact and symmetrical. They must not show a disc. If the centre be not covered well, they must be discarded as soon as their colour can be got with a sound close centre. They should be as perfect as the Ranunculus or double Crow-foot, and as double as a double Primrose of the better kind. The flowers should be abundant at the ends of all the shoots in bunches, with footstalks sufficiently long to prevent the blooms covering each other. They should not be larger than $1\frac{1}{2}$ inches in diameter, nor smaller than an inch, and the habit of the plant should be short-jointed and shrubby. At an exhibition they must be shown on the plants. These should not be more than 18 inches high, nor less than 12 inches, with one or more flowers perfectly open at the end of every shoot. The style of flower in all the family of Chrysanthemums should rank thus: Flowers forming a half ball, Ranunculus fashion; flowers forming a half ball by incurving; flowers forming a half ball by reflexing; Anemone flowers; tasselled flowers; quilled flowers; flowers showing a disc. Of these the first three alone are showable in an open class; the Anemone flowers form a class by them-

selves; the tasselled and quilled sorts are not showable except on the plant in collection.

So far Mr. Glenny, but now-a-days there is a wider circle than that of the "florists" to be pleased, and I know that ladies and all persons of cultured taste prefer a spray or two of Elaine or some of the Japanese feathery petalled kinds to any of the "globes" or half globular kinds ever raised. It does not follow that globular regularity constitutes all the beauty of which this or any other flower is capable.

CHAPTER V.

CULTURE.

I. FOR ORDINARY DECORATIVE PURPOSES.—The first object in the culture of these plants for this purpose is to obtain dwarf specimens, and to preserve all the foliage near the base of their stems. To effect this, the cuttings should be taken from the old stools in March or early in April, striking them in a shaded part of a cold frame under a hand-glass, and, as soon as rooted, the young plants should be potted singly into small pots filled with sandy loam, to induce them to emit an abundance of roots. A cool airy situation out of doors or in a cold pit should be selected for them, and constant attention be given to the supply of water. After standing two or three weeks in this position, they should be shifted into the large pots they are intended to bloom in, one plant in an 8-inch pot or three in a 12-inch one, using as compost a mixture of equal parts loam and rotten manure, and soon afterwards the top of the plant should be taken off, which will cause it to protrude branches, and these again may be stopped if they have grown strongly and it can be done before the end of June. The old stools from which the cuttings were taken in March may be planted out under warm walls, or near palings, and will then afford strong tops for rooting in August. Five cuttings should be placed in a 7-inch pot, and these if grown on freely, make useful little plants. During the whole of the time the plants are out of doors, which will be till the approach of frost, they should stand quite clear from each other, that each one may have the full influence of the air, and being carefully watered every day with pure water, and occasionally with diluted liquid manure, the new growth is vigorously developed, and the blooming consequently satisfactory. The plants may stand on a sunny vine border or beside walks in sheltered, but not in shaded, positions; stake early and secure the plants from being blown over and damaged by high winds. If the points of the shoots which are last taken off can be induced to root quickly, they make pretty little plants of a few inches in height, surmounted with flowers nearly as fine as those on the larger specimens, and they are useful for the fronts of shelves or to stand before the large pots. On the removal of the plants to the greenhouse crowding should be avoided, and a full supply of both air and water given daily until the flowering season is past, when they may be removed to a shed or placed in the open ground, and protected at first from severe frosts by means of a mat or two thrown over them.

A good and simple plan of growing Pompon and other free blooming varieties of Chrysanthemum is to plant out the rooted cuttings in April or May, on open sunny borders in rows 5 feet apart, the plants being 4 feet apart in the row. Stop once or twice to make them bushy. Such plants carefully lifted and potted early in October produce abundance of flowers.

II. FOR LARGE BLOOMS.—In the culture of standard and trained dwarf Chrysanthemums judicious stopping and careful tying into shape is a main feature in their production. Now, on the contrary, when large blooms are desired, stopping the growths is reduced to a minimum, and success depends in a great measure on the judicious application of suitable manurial stimulants, on thorough maturation of the stout main shoots which are restricted in number from one to three on each plant, all axillary shoots being removed almost before they appear, and all the training the plants ever receive is securing them to upright stakes to prevent injury from wind. On the plants being grown on from the cuttings or rooted-sucker stage in December or January to the blooming stage in November without any check or other injury, the production of really fine blooms may be said to depend. The stoutest of rooted suckers are preferable, but if suckers be weakly or drawn by the overcrowding of the plants when housed for blooming, then it is best to depend on the most solid and vigorous cuttings obtainable. Place each carefully in a small pot of sandy loam in a cold pit or frame, taking care that they be as near the glass as is possible in order to prevent their becoming drawn up in a weakly manner. Give air freely, drawing the lights off entirely during bright warm days. Repot from time to time in good loamy soil, keeping a sharp eye on the state of the roots, as plants which are allowed to become root-bound or checked in their early stages rarely if ever give satisfactory blooms. As soon as all danger from spring frosts is over the plants may be placed outside near a wall or fence, or in any position fully exposed to sunshine where they may be sheltered and secured from injury by rough winds. Temporary lath or other light fences, formed of upright stakes and wires not less than 5 feet in height, serve admirably, as the plants may be safely secured to them, and the light framework of slender sticks with stouter supports here and there, does not prevent their obtaining the full benefit of air and light, both so essential during all stages of growth. The production of all growth from first to last without artificial heat of any kind, and in full exposure to sun and air, is the secret of proper growth maturation. Ripening up the growth in August and September means but little unless the previous growth has been well nourished by applications of soot water, and now and then a dose of liquid manure or soap-suds. An occasional syringing with soot water improves the leafage, and serves as a simple preventive to insect and mildew ravages. About the end of August or early in September is a critical time with growers of large blooms. Flower-buds will be showing at the ends of the strong upper branches or shoots, and it is now imperatively necessary that the buds in the leaf axils below be removed with the points of scissors or pen-knife. This causes all the flower-producing power of the shoot to become concentrated in the terminal bud, and the result is a bouncing big bloom early in November, just in time for the exhibition stands. This operation is called

SETTING THE BUD, and unless it be duly performed in the nick of time, the two or three axillary buds immediately below it take advantage of the slackening of growth which takes place while this terminal flower-bud is forming to push forth on their own account, and after growing away for 6 inches or 1 foot these also each form what is called "terminal crown buds," but which are more properly "secondary" or axillary ones as opposed to the terminal or primary buds which form a few weeks earlier at the apex of the unstopped main stem. Enormous blooms are thus obtained by this system of growth—force concentration. Some growers take out the primary bud as soon as it appears, and thin out the secondary shoots which protrude below it to one or two at the most, and so treated, aided by careful attention to feeding, noble blooms are obtained, and one has the choice of two or three flowers instead of limiting one's chances to one bud and its future development, as is the case when the terminal bud only is retained. Strong-growing kinds flower best from the third branching, that is to say, the flower-buds first seen are pinched out, and the strongest shoot is selected from just below them to lead away. Weak-habited kinds are not easily overgrown, and the second bud which shows is allowed to bloom. Messrs. Dixon give the following directions as to the culture of *Chrysanthemums* for larger blooms. They are clear and to the point: "The stands of cut blooms to be seen at exhibitions show to what perfection this flower can be brought by skilful treatment. In the early stages of growth the same soil and treatment are necessary as those already described, except that the plants are not stopped, but allowed to grow naturally, and it will be found that as the season advances the crown will branch into three or four leaders, which should be allowed to grow but all laterals should be removed as soon as they appear. When the flower-buds show themselves in September, the centre bud must be the one retained, as it produces the largest bloom. All the others must be carefully removed without bruising the stem, except when the centre one is imperfect, in which case one of the others must be left instead. If possible stand the plants in single rows, with room enough to get between each row, putting in a good stake at each end and one in the centre. Then stretching wire to each stake, you can tie the stick by which the plant is supported to the wire, and prevent the wind from blowing them about; it also exposes them thoroughly to sun and air. Some growers for exhibition put two plants in a 10-inch pot, but we prefer only one in an 8-inch pot. Use manure water liberally until the flowers show colour, taking care not to give it when the plants are dry, but water first and then apply it." Since the above was prepared for press, I have been so fortunate as to gain the practical experience of a successful cultivator of the *Chrysanthemum* near Liverpool. I think I may fairly say that better or more comprehensive directions were never before given on this point.

STRIKING AND STOPPING.—I strike at the end of February or early in March. If rooted in February in gentle warmth and then hardened to cool treatment as quickly as possible, the plants can be placed in their flowering pots (10-inch) in May. One flower and only one stem should be encouraged from the Mrs. G. Rundle type to produce large flowers, while three or more shoots should be encouraged from Queen of England,

Empress of India, Golden Empress, and others. These should be stopped as soon as rooted, and the number of shoots required encouraged to lead upright. These with those not stopped will produce a small bud during May; the points of the shoots should be taken out at once to prevent this bud forming, and all the side shoots taken out with the point of a knife as soon as they can be seen except one nearest the top, which must be encouraged to extend. If you allow the bud to form and the plants to stop themselves, time is lost and the next bud is late. The plants should be hurried out of this stage as quickly as possible. The next bud will appear about the middle of July, known as the July bud. Many leave or rely on this bud, but it is too early, and it will only produce rough, badly-shaped flowers. Do not allow this bud to form; remove all side shoots but one, as in the case of the earlier bud, as soon as they can be seen. The shoot you allow to grow will produce another bud about the last week in August after the plants have grown about a foot or little more. The August bud is the one to be selected, and will produce fine flowers. This bud appears at the end of the shoot, and is known as the crown bud. But suppose there is a doubt about the matter—one bud is taken for a chance flower, and the remaining two are treated upon a different principle. The bud upon the second shoot may also be taken, but, as a measure of precaution, instead of rubbing out the three growths at its base, one is left temporarily to divert the flow of sap from it until it is clearly seen that the force of the sap is not strong enough to spoil the bud, when of course the growth must be pinched out. The third shoot would be allowed to grow on, taking care to remove its two weakest companions as soon as the strength of each could be recognised. Thus the cultivator who adopts this system has three chances from the same plant, so that if he misses the mark with one flower he is sure to hit it with another. We have seen three distinct characters of flowers upon the same plant over and over again, the variations being due to nothing else than the time and manner of disbudding. The next point of importance in the production of large blooms is the theory of the ripening of the wood, which in the case of the Chrysanthemum will not hold water. There must be strength of stem and large green leaves down to the rim of the pot to produce good-sized, well-formed flowers.

Mr. Lynes says that after "having cultivated the Chrysanthemum for some years I do not know of any one system of which you may lay down as a hard-and-fast line to follow and guarantee results. What is termed the natural system is to let the plants grow as they will until they show the summer bud, which will generally be from the middle of June to the end of July. This bud is useless. Several shoots are produced below it, when as many may be left as the cultivator deems fit—from three to eight, variety and strength of plant to be considered. These shoots, being left to grow, will each show another bud, which is termed the crown bud, and that is the bud to produce fine flowers, providing it comes at the proper time. When first seen it is very small, and has three vigorous shoots around it. These should be at once pinched off, likewise all after growths, to direct the whole resources of the plant to the flower. The difficulty is to induce the plants to show this bud at the proper time, for upon this (providing the plants are healthy and vigorous) depend the future results. Take three plants of any one variety, treat them alike in every respect; the probabilities are

one will show the crown bud in the middle of July, another in the middle of August, the third not until September. My opinion is, the time for them to show this bud is between the 10th of August and the 7th of September. Seasons vary, but from several years' experience I have no hesitation in saying a great percentage of buds taken between the above-named dates will prove satisfactory. If taken before, they are apt to become hard and not open properly."* I know at least one celebrated grower of large blooms for exhibition who, having struck the cuttings in the usual way, grows them on by planting them out in the border of a cool orchard house, where they are trained to single stems, each bearing one enormous flower at its apex. Under this system there is less danger of the plant suffering from drought at the root, and some of the varieties attain a height of 10 feet to 12 feet, the stems and foliage being enormously stout and healthy, and the flowers exceptionally fine.

III. FOR TRAINED STANDARDS.—In order to grow good standards select the strongest and stoutest of the root-suckers which can be found on the old plants after blooming in January or February at the latest. Carefully separate them from the old stools with as many roots as is possible, and pot them at once in 4-inch pots. Be careful as to names, as any neglect of this kind proves a fertile source of disappointment. Place them in a cold pit or deep frame on a bed of coal ashes, and sprinkle with water from a fine rose. Keep the lights down close for a week, so as to induce the protrusion of new roots, after which air should be freely given (except during hard frost), and on fine warm days the lights should be entirely removed. If lateral buds show themselves in any way prominently, carefully remove them with the sharp point of a pair of scissors, or with a sharp penknife, until the required height is attained. As growth proceeds, secure the growth to a slender stake, so as to prevent its being accidentally broken. Pot on as may be required, taking care that the young plants never become root-bound in the pots. In April or early in May, all danger from cold being over, the plants may be placed on a bed of coal ashes in the open air where they will be fully exposed to sunshine and air, but sheltered from rough winds. On no account must they be allowed to suffer from want of water. When the carefully nurtured single stem has reached the desired height, take out the upright stake which has hitherto supported it, and add one having a semi-hemispherical wire trellis at the top of this shape, and 10 inches or 12 inches in diameter. Bend the shoot around the outer rim of the framework. The plants should now be placed in their blooming pots. Now for the first time the axillary buds (hitherto carefully removed) may be encouraged to develop, which they will do speedily after the main shoot or stem of the proposed standard has been coiled round the frame. Judicious pinching now and then and syringing morning and evening with clear soot water will be conducive to the formation of strong shoots covered with healthy clean foliage. In cold districts it is not safe to stop or pinch off the growing points after about the last week in June. If pinched too late, the wood does not become thoroughly matured ere the flower-buds form and the production of fine flowers solely depends on strong and well-ripened growths. In warm

* Paper read at the Wimbledon Gardeners' Society, December, 1882.

localities, as in the south of England, pinching may go on as requisite until about the second week in July. As the pots become filled with roots, manure water and soot water may be given on alternate days. The best varieties for making good standards are the following: Large-flowered—Mrs. Rundle, George Glenny, Mrs. Dixon, aureum multiflorum, Empress of India, Eve, Venus, Lady Slade, Lady Harding, and White Venus. Annie Salter well grown makes a telling specimen, as also do most of the varieties of the Pompon and Pompon Anemone race under liberal culture. Mr. Brunlees, Brilliant, Faust, Julia Lagravère, Calliope, Elaine, Mrs. Haliburton, and Peter the Great also make effective standards.

IV. FAN-TRAINED DWARFS.—*Chrysanthemums* of the Mrs. Rundle (Incurved) and Annie Salter (Reflexed) types make very attractive specimens when trained in a mushroom or pancake-shaped manner on a trellis-work of bamboo sticks and wire. As to tying and training, instructions are here given. The following directions are those supplied by Messrs. Dixon. The practical notes on stopping are especially valuable and must be carefully followed. "In the choice of plants for specimens great care should be taken to select only those varieties possessing the following qualities—viz., free blooming, clear and distinct colour, fine foliage, and graceful habit. Every attention has been paid by us to select only those sorts which contain the above properties, and which will be found the best. The soil should consist of two-thirds loam, and one-third rotted stable manure, with a liberal admixture of sand. Two inches of broken potsherds should be placed in the bottoms of the pots for drainage. If large specimens are required for exhibition, it is essential that cuttings should be made in the autumn, and only such as are healthy and robust selected (or a strong sucker with roots). These should be potted into $2\frac{1}{2}$ -inch pots, and when rooted shifted to a large 3-inch size. As soon as they are established in these, they must be stopped, being careful to take out only the extreme point of the shoot containing the unexpanded leaves, as the plant then continues to lengthen, and it also encourages the growth of the laterals, of which five or six will be found sufficient. These, as they increase in length, should be pegged down, and great care taken that they are not injured or broken. Place them in a cold frame near the glass, giving air on all favourable occasions; continue to shift, and as soon as the laterals are 6 inches long, they must be stopped. Do this until the second week in July. In the last week of June the plants should be shifted into their blooming pots, which are 11 inches in diameter. Never shift and stop at the same time. Fourteen days should always be allowed between these operations. The shift then strengthens the laterals. (For exhibition specimens this should never be departed from.) When in their blooming pots, we stand them on three small pots in a good open piece of ground; this enables the water to escape freely, and prevents the plants rooting into the ground. As soon as the roots get to the sides of the pots, we commence giving liquid manure. For the first three weeks, once a week; the next three weeks, twice a week; after that, until they show colour, every other day. The foliage should be well syringed, and constant and well watering is necessary during hot weather to ensure green and healthy foliage. Nothing spoils the *Chrysanthemum* sooner than want of water. They will now require more care in regulating the shoots, which

should be kept down as near the edge of the pots as possible. About the middle of September train the plants into the shape you want them, by neatly staking each shoot, leaving the stick longer than the shoots, as they continue to lengthen until they come into flower. As soon as the flower buds appear, disbud. This is done by removing all buds except the one in the centre of each branch; for if the plant be vigorous, these will be quite enough to insure a fine head of bloom, but if a quantity of bloom is preferred to large flowers, little (if any) disbudding need be done. They should be housed about the middle of October; but in this be guided by the state of the weather, as they are better outside whilst the weather is open, and the buds do not show colour; the foliage improves by remaining in the open air. When housed, avoid fire heat, except when absolutely necessary, but give them as much air as possible.

"Pompons are cultivated in the same manner as the large-flowering varieties, but more stopping and less disbudding are necessary to ensure success. Another style of plant which has become very popular lately is the standard. Either Pompons or the large varieties will do, if care is taken to grow only the suitable varieties—of which now-a-days there is no scarcity. Vigorous autumn cuttings or suckers should be selected, shifting as already described, and staking the plant to the height you want the stem, which for exhibition is not generally less than 2 feet 6 inches. After they are a little beyond the required height, stop them, trying to get as many breaks as possible from the first stopping to form the head. Be particular in keeping all side shoots pinched off. A small framework of laths erected under the head is the handiest for training them on. The sorts selected are early varieties which enable us to stop them a fortnight later than the others, which is necessary to obtain a good head."

COMPOST AND MANURES.—The best compost for the *Chrysanthemum* is one mainly composed of sound red loam, and the more vegetable fibre it contains the better. My own practice is to buy a few cartloads of this during November. It is dug from a mountain side where the grass and other herbage is short and fine, being eaten off closely by sheep. Almost any kind of plant will grow in it, and it is of that texture which holds much water and yet is never "soapy," but friable, even after it has been squeezed in the hand. Sand in any pure form I do not use in the culture of the *Chrysanthemum* (except for rooting cuttings in), but instead I add a cartload of old lime-mortar to, say, five loads of the loam. A barrow-load of pure soot is added to the heap as it is turned over for the first time in December. If possible let this operation be done during dry, frosty weather. The soot is useful as making the soil unpalatable to the worms, and as it consists mainly of charcoal or carbon in a fine state, and holds also some ammonia, it is manurial also. Some growers advise adding a fourth or more of well-rotted manure to the loam, but I am convinced that the finest and most floriferous growths are those made in red loam, lime rubbish and soot, as above described. The right time to apply the manure is after the flower-buds are formed in August and September, about which time the soil becomes partially exhausted and quite filled with roots. It is quite possible and easy to grow large plants with enormous sappy leaves by adding manure largely to the compost at the final shift into blooming

pots (say in May or June), but it does not follow that plants so luxuriantly grown, and so healthy in July, give the finest flowers in November. It must never be forgotten that size of leaf and apparent vigour of plant is no guide to good bloom, no matter whether the desired results are quality or quantity. I rely on a sound, sweet compost, careful and regular watering, and from the first week after the cuttings are rooted I freely expose the plants to sun and air, except during sharp frost. What is requisite is not growth only, but sound, firm wood, or growth well matured. Once every week during summer the plants receive a dose of soot water. I am now firmly convinced that many growers fail in using a compost containing too much manure during the early stages of the plant's existence, and by relying on a basis of sound loam we have the plant more entirely under control, as manurial stimulants can most easily be given in the liquid state when it is deemed desirable, or when it is most useful to assist forward and to aid the development of the flower-buds. Now, here is a piece of advice given to me some time ago by Mr. N. Davis, of Camberwell: "Never give liquid manure to the plants while forming their buds, or else blindness will be the result." This advice more especially applies to plants from which "perfect" or "prize" blooms are expected, for we know that really creditable decorative bushes, well laden with third-rate flowers, may be grown by giving manure water freely as soon as the blooming pots become filled with roots, say in June or July; indeed, for specimen plants or large bushes it is almost a necessity; and Messrs. S. Dixon, in their notes on Chrysanthemum culture, say, in speaking of large trained specimens, "As soon as the roots reach the sides of the (blooming) pots we commence giving liquid manure." I am particular in clearing up this point of when and how and to what plants to apply manure water, as there has been much misunderstanding on this point and on that of the delicate question of how and when to stop and disbud, which is fully alluded to and explained in another place.

The addition of much manure to the compost causes unstopped plants to grow too quickly, and so their growth is not sufficiently matured. On the other hand, specimen plants or decorative bushes are stopped frequently up to the second week in July in the south of England, or to the last week in June in the north of England, Scotland, and in Ireland. All this stopping and training of the shoots naturally checks the growth, and so a richer compost may in their case be used with more safety than for unstopped plants with only one to three stems from which large blooms are to be obtained.

SPECIMEN CHRYSANTHEMUMS.—According to a correspondent of the *Gardener's Magazine*, it is commonly supposed by those who have not had much practical experience in Chrysanthemum culture, that whether the plants are required for exhibition or for the embellishment of the conservatory, it is quite early enough to strike the cuttings in March. But this is a grave mistake, as many growers find to their cost in their earlier efforts. When plants are required simply for decorative purposes, and their dimensions and the quality of the flowers are of no great importance, it is of but little consequence if the work of propagation is delayed until the end of April. In raising plants for specimens and for the production of first-class blooms, it is essential that the cuttings should be

struck very soon after the termination of the flowering season. Some varieties do not produce a new growth so early or so freely as others, and the best advice an inexperienced cultivator could have upon this point is the recommendation to take the cuttings of the respective kinds as early after the end of the third week in November as they are obtainable. By striking the cuttings before Christmas several great advantages are obtained, the most important being the gain in time and the practicability of dispensing entirely with the use of artificial heat. Very little progress is of course made by the young plants until the end of February or early in March, according as the weather may be mild or severe, and it is not desirable it should be otherwise, as any considerable growth made during the short days of mid-winter is not likely to be very satisfactory. The gain in growth is considerable nevertheless, as at the time the cuttings struck in spring have to be in the propagating pit the autumn-struck plants will be well furnished with roots, and in a condition to make a short-jointed growth from the first. My experience induces me to attach considerable importance to growing *Chrysanthemums* entirely without the aid of artificial heat, for although the skilful cultivator may, by removing the young plants from the propagating pit at the earliest moment, and hardening them off as quickly as possible consistent with their safety, avoid their being seriously injured, a cool structure is unquestionably the best for them during the time they receive the shelter of glass.

CHAPTER VI.

WATERING.

No plant requires more constant attention as to watering than does the *Chrysanthemum*. This is especially the case during July and August, when the pots become filled with roots and an additional strain has to be borne, as the plants are at that season about making up that portion of their growth upon which the flower-buds appear. Rain or soft river water is best if it is readily obtainable, but if pump or spring water must be used, expose it for at least some hours in tubs or other open vessels, so that it becomes warmed and aerated. My own practice is to water twice a day after the plants are placed in their blooming pots, say in May or June. Dribbling a little water on the surface will not do; nothing but a thorough soaking serves such a gross-feeding plant. Syringing the foliage every evening an hour or two before sunset is of great advantage in keeping the foliage clean and bright and free from green fly and other insects. When manure water is applied it is essential that the soil be thoroughly moist beforehand. If the earth is in any way dry always give a soaking of pure water before the manure water be applied. It then finds its way downwards, regularly becoming equally diffused throughout

the ball of earth within the pot, and every rootlet is fed, and none are injured, as might otherwise be the case if watered with crude manure water when the earth was in a dry state. Soot water is a great aid to culture in many ways, and should be carefully prepared, so that no soot floats on the surface. Syringing with a clear solution of soot makes the leaves of a beautiful dark and glossy green tint, and is an excellent preventive of green fly. We water the whole collection every morning about eight o'clock, paying great attention to the thorough soaking of every plant; and to do this effectively when a plant has been allowed to become dry, three or four waterings are necessary. As the plants increase in size and the ball becomes filled with roots, it becomes necessary to watch the edges and sides of the ball narrowly, otherwise most of the water which should diffuse itself gradually and thoroughly throughout the ball of earth merely trickles down the inside of the pots, leaving the ball as dry as tinder, although apparently a thorough good watering had been given. We watch our plants very narrowly, and every week devote some time to ramming down the edges of the ball tightly with a blunt lath. A little labour and attention in this way is abundantly repaid. In very hot dry weather a mulching of rotten hotbed manure may be given, and this is especially valuable if the earth has been in any degree washed away in the operation of watering. Even a handful or two of short lawn grass from the mowing machine will economise labour and water also if it be sprinkled on the surface of the soil in which the plants are grown—I mean early in the season, before the soil is in any way exhausted by the ramifying rootlets; after that takes place mulching with rotten manure is most valuable.

STOPPING AND DISBUDDING.

Both these operations are of great importance in the growth and training of large specimens for show. Stopping the points of the main shoots must be carefully attended to. First, say in December or January, the rooted sucker or cutting has its point carefully pinched out, and this causes branches to appear from the axils of the three or four leaves below the part pinched off. Pinching or stopping must be done at the exact moment when side branches are desired, as only the bud at the very end or top of the shoots must be removed. To allow a shoot to grow 3 inches or 4 inches longer than is requisite, and then to stop it back into the partly hardened wood, is fatal in all ways. Here are Messrs. Dixon's rules on stopping, which may well be reproduced in this place. For specimen plants or decorative bushes stop until the second week in July, in the south of England that is; in Ireland or north of England the last week in June is quite late enough to stop; after that time is fatal to good flowers. Again, never stop and shift on the plants into fresh pots at the same time. Ten days or a fortnight should always be allowed between these operations. The repotting or shifting then strengthens the laterals. "For exhibition specimens," say Messrs. Dixon, "these rules should never be departed from." After the first stopping one to three shoots only should be allowed to grow on. Pick out all other growths with a knife. Unless the cuttings were carefully disbudded or

cleaned ere they were inserted in the cutting pot, basal growths or suckers are apt to annoy one. Pick all these carefully away as soon as seen. Tall plants for large blooms are rarely stopped more than twice; they naturally stop themselves twice—indeed, in May and in July. To allow them to do this, however, is a sheer loss of time, and the better plan is to pick out the May and July flower-buds as soon as they appear, leaving only one shoot to lead up from immediately below the point on the shoot whence the flower-bud has been removed. It will thus be seen that stopping and disbudding are very nearly related in the middle stage of Chrysanthemum culture.

DISBUDDING PROPER, however, is taking out all side growths below the flower-bud, which is retained as the most likely to produce a fine bloom. Every axillary growth, or those which appear below the flower-bud, must be picked out, care being taken that the leaves are uninjured in the operation. August is indeed a busy month to the grower of Chrysanthemums, as it is but rarely that the careful work of disbudding can be left to ordinary assistants. So far as decorative bushes are concerned, where quantity and fair, rather than superlative, quality of the blooms is desired, disbudding may be reduced to a minimum. A due thinning out of the weak shoots, or rather the prevention of their appearance, removal of sucker growths, and ample feeding and judicious stopping will produce fine plants, each shoot being either a wreath of flowers, or bearing a truss of four or five blooms at the top. Writing in August, 1880, Mr. Hinds says:—

“Chrysanthemum growers in all parts of the country will now be on the *qui vive* for the buds which will produce their fine show flowers early next November. Outside a very narrow circle the method of growing large flowers is indeed a mystery. Different kinds of compounds are recommended for potting; the size of pot in which they should be grown is diligently inquired after; when to pinch, how to pinch, and how many shoots should be grown to a plant are all questions that crop up periodically among the uninitiated. There are many who think they have only to ‘order the good kinds’ to insure success. But what a fallacy! The good or evil will be accomplished during the present month. Those who grow flowers for size usually grow from three to nine shoots upon a plant. I have seen good-sized bushes bearing fine flowers under a skilful system of cultivation and disbudding. Many of the early flowering kinds are now showing bud—of course in an embryo state; still it is there. Young shoots will be observed at the base of the bud which, if allowed to grow, will render the bud useless. But first of all examine the form of the bud and the vigour of the plant. If the bud is cone-shaped, and the plant does not appear to be over vigorous, remove the embryo shoots at the base of the bud at once. Of course some knowledge of the kinds, as to whether they are early or late varieties, is indispensable. In a doubtful case it is prudent to leave the bud and one shoot, so that in the event of the bud turning out to be imperfect or too early for the kind, there is a chance left of obtaining a later flower from another bud. The removal of lateral growths, skilful disbudding, and feeding the plants occasionally with weak soot water will contribute much towards a display of fine flowers next autumn.”

STAKING AND TRAINING.—Staking is necessary for at least two reasons—to prevent breakage by winds, and to enable specimen plants to be trained conveniently. Plants grown for large flowers seldom require more than a single stake to secure them, but it should be sufficiently stout to obtain a firm hold of the earth in the pots. Dwarf specimens may be trained on sticks laid flat-wise over the top of the pot and secured with copper wire to a wire ring fixed below the rim. These and a few short bamboo stakes inserted at various angles in the soil will be sufficient to secure the shoots wherever desired. Soft raffia or worsted may be used for tying purposes. Specimens for conservatory decoration are easily secured to slender stakes inserted soon after the plants are shifted into their blooming pots. Six stakes inserted around the sides of the pot and three in the centre will, as a rule, be ample, and, once in position, the main shoots can be secured as growth is made. When tall plants are grown for cut blooms, a few stout stakes 6 feet high may be driven into the ground, and three or four lines of tarred twine or wire carried along from one to the other, to which the tall shoots may be secured as growth progresses.

Bamboo stakes are preferable to deal sticks, being far more durable. As a substitute for either, rods of Hazel, Ash, Poplar, or Willow may be employed. In the case of Willows they should be cut after the leaves fall in autumn, and well dried by being tied in small straight bundles and laid upon the top of a smoke flue or on the top of a boiler. So treated they dry firm and straight, and cause no annoyance by rooting into the soil as is invariably the case when they are used green.

GRAFTING two or three varieties of *Chrysanthemum* which bloom simultaneously on one stock, if not as yet a general practice, is sufficiently so to warrant some notice. In 1876 and 1877 Mr. Charles Turner adopted this mode of culture, and in the latter year (as we learn from the *Garden*, vol. xii., p. 175) he had over 200 fine plants worked as standards on 3 feet high stems, several sorts which bloom at the same time being grafted into one head. At Oxford also this grafting practice is pretty general, as we learn from a visitor at the *Chrysanthemum* show recently held in that city. Long ago, indeed, Mr. Fortune found Chinese gardeners employing *Artemisia indica* as a stock on which they grafted their *Chrysanthemums*.

CHAPTER VII.

CHRYSANTHEMUMS FOR SMALL GREENHOUSES.

ANYONE who has a greenhouse, a well-lighted porch, or even a large bay window or two, should grow a few Chrysanthemums in pots outside during the summer, as they may be well bloomed even in a window if moved inside after the buds show colour and before sharp frosts set in in October. In country places every artisan or intelligent labourer might build a rough greenhouse with a few old lights for the roof, five shillings' worth of timber for supports, and some pieces of canvas or bast mats for the front and sides. No flower is better worth attention, and amateur growers should encourage garden-loving workmen by giving them spare plants or cuttings. The following directions from *Gardening Illustrated* are specially suited for beginners.

There are three distinct objects for which Chrysanthemums are grown, viz.: First, specimen plants in which the beauty of the individual flower is subordinated to the training of the plant to some particular shape; second, for conservatory decoration where the object is to get a brilliant mass of colour irrespective of individual flowers or shape of plant; and third, for the beauty of individual flowers only, without regard to number of flowers or shape of plant. Each of these ends requires a distinct system of culture, and the great number of failures in growing Chrysanthemums are probably owing to mixing all three systems together and keeping no definite object in view. In small greenhouses there is neither room nor need for specimen plants and great masses of colour, so we shall confine our remarks to the culture for individual flowers, which is by far the most interesting of the three.

PROPAGATING.—Cuttings should be put in round the edge of the pots in the usual way during the last week of January, not sooner, for we do not wish the plants to be drawn up under glass before we can venture them outside. The pots of cuttings should be put near the glass on a shelf in the greenhouse; there is no need for either bell-glasses or bottom heat; indeed, both are hurtful.

POTTING.—When the cuttings are rooted put them into 4-inch pots, keeping them still near the glass. When the roots come through the soil to the side of the pot shift into 6-inch pots, and as soon thereafter as the weather will permit stand them outside, tying each plant to a light stick to prevent its being broken by the wind. From the time the cuttings are put in until now, and, indeed, to the end of the chapter, never pinch; let the plants grow up to one single stem. Place the pots on slates to prevent the ingress of worms in such a situation that they may get sun the most of the day. Do not plunge the pots or protect them from sunshine in any

way ; this, doubtless, entails far more labour in watering, but it will be amply repaid by a dwarf plant, well-ripened wood, and consequently fine flowers. When the roots come through to the sides of the 6-inch pots, probably about the end of May, give a final shift into 9-inch ones.

STAKING.—When the plants are 1 foot high put a light stake 4 feet long in the centre of each pot, and tie the stems to this as they lengthen out. Towards the end of September we may expect gales of wind, so put three more light stakes at equal distances apart around the pot, bend them over, and tie all the points to the centre stake ; this will be found far more effective than one thick stake.

WATERING.—While the plants are in the open air water them frequently overhead through a fine rose, as well as attend to watering at the roots. If you have a command of hot water, make the water, for both purposes, perceptibly warm to the hand ; this greatly tends to keep the plants in health, and takes but little extra time.

INSECTS.—Towards the end of summer two insects will probably give some trouble, viz., earwigs and green fly. The former show themselves by the leaves being eaten at the edges. Insert some rolls of paper between the stem and the stake and examine them in the morning, destroying the intruders. The green fly will be found to attack the points of the shoots ; choose a dry, still evening, and thickly dust them over with tobacco powder, washing it off with the rose or syringe the following day. All shoots which spring from the roots must be carefully rubbed off until flowering is over.

FEEDING.—By the beginning of October the flower buds will form ; then you must feed with manure ; up till now you have not done so, and turn a deaf ear to those who advise you so to continue. Any good manure will do, but one of the many made-up ones now in the market will be the easiest applied. Standen's is as good as any ; a small dessert-spoonful, sprinkled over and stirred into the top soil, constitutes a feed ; let a week intervene between the first two feeds, after that a fortnight between each until the flowers are past.

BEST VARIETIES: INCURVED.—Mrs. G. Rundle, white ; Mr. G. Glenny, sulphur ; Mrs. Dixon, yellow ; Lady Hardinge, rose ; Peach Venus, peach ; Jardin des Plantes, golden ; General Bainbrigge, bronze ; Empress of India, white.

POMPONS.—Bob, crimson ; General Canrobert, yellow ; Cedo Nulli, white, lilac, yellow and brown forms ; Madame Marthé, white and golden yellow.

JAPANESE.—Elaine, white ; Ethel, late white ; Fair Maid of Guernsey, late white ; Peter the Great, yellow ; Fulton, gold ; Cossack, brown ; Tokio, red ; James Salter, lilac.

ANEMONE-FLOWERED.—Large : Fleur de Marie, white ; Glück, yellow ; King of Anemones, purple ; Princess Louise, lilac. Small : Madame Montels, silvery lilac ; Calliope, red ; Dick Turpin, red and yellow.

MISCELLANEOUS OR REFLEXED.—Progne, crimson-purple ; Crimson Velvet, velvety crimson ; Annie Salter, yellow ; Dr. Sharpe, magenta-red.

DISBUDDING.—When the buds are quite set and standing apart from each other is the time to disbud ; this can usually be done at the time of hous-

ing for the winter. Leave only one bud to each shoot. If any green fly be found round the base of the bud left, remove it with a small brush dipped in water; there will probably be no further annoyance from these pests.

HOUSING.—Choose a dry day for housing, and the plants may be put close together, leaving only as much room as will keep the shoots from touching each other. About the time the flowers are expanding, mildew will probably make its appearance on the foliage. This is the result of a number of plants being housed in a small space, and the temperature kept at 45° or thereabouts, for the sake of the other inmates of the house. Nothing need be done; the flowers will win the race and then the plants can be cut back.

TREATMENT AFTER BLOOMING.—When the flowers are over, cut back the main stem, so as only to leave one or two of the small side shoots which have now formed; these are left to keep the sap flowing until shoots spring from the roots. These shoots from the base of the plant form the cuttings, which should be taken at the end of January, as directed at the commencement of this article. When you cut back the stems do not remove the stakes, for the pots by this time are so crammed with roots there is a danger of all the water running through the holes left and the plant perishing from want of it. You need not be very choice as to soil; perhaps the best is two parts rotted turf to one of well-decayed manure, mixed with a good deal of sand, riddled for the first potting, and rough for the other two. Under this system of

SINGLE STEM CULTURE, leaving one bloom to each shoot, you will only get from three to nine blooms on each plant, but then they will all be good. Now suppose you pinch until you have ten stems round a 9-inch pot, the writer's experience is that if you have to flower your plants in a small house you will only have one or two good blooms on each plant, and these one or two will not compare either in size or finish with those on the single stem. Then you can easily house half as many again plants with single stems as you can those with ten. When we say that all the blooms on the single-stem system are good, of course we do not mean that all are up to the exhibition standard, but simply that they are of good size and form. With fair luck about one bloom out of twenty should be fit for the exhibition table; it is the old story that under the same culture the man with 100 plants can beat him who has only ten. Another advantage of single-stem culture is that you can successfully flower the incurved varieties with long petals. As for what varieties to choose for a small house, the only limit is that none should be chosen that do not set their flower-buds by the time you have to house them, for under the confinement of a small house there is a danger of the plants making new wood and never forming flower-buds.

For those who have not time for this careful treatment, there is a simpler style of single-stem culture, which gives fair results. Put in cuttings and treat them as directed above, but keep them in the 4-inch pots till you can trust them outside. Select a sunny border; the soil should be in fair heart, but not enriched with fresh manure; turn the plants out of the pots and plant them 2 feet apart. Attend to staking, watering overhead, and at the roots if the weather is very dry, rubbing off shoots from the roots,

and keep a look-out for earwigs and green fly. Nothing more is needed until the flower-buds are set, then lift the plants and pot into 7-inch pots. Use light soil passed through a fine riddle. Keep the foliage damp, and shade the pots by placing them on the floor of the greenhouse. In a week or ten days the pots may be lifted on to the stage, disbudding attended to, and liberal feeds of manure given. The blooms will come deficient in size, but well shaped and finished, and very much better than the average *Chrysanthemums* seen in small houses.

OPEN-AIR CULTURE.—The introduction of early blooming races of the *Chrysanthemum* must of necessity give a great impetus to its culture in the open air. Some of the more hardy of the kinds long ago introduced, such as the quilled yellow and old tasselled purple, flowered fairly well on sunny walls during mild Novembers. I have seen the cottage fronts and little gardens in the suburbs of London quite gay with these old kinds during mild seasons, but as a rule the *Chrysanthemum* was scarcely into flower before the severe frosts of November cut them off. Now all this is changed, and there are two distinct and satisfactory ways of growing the *Chrysanthemum* in the open air. The easiest way is to grow the modern kinds now known as summer bloomers, which begin to bloom early in August, and continue quite floriferous and gay until the frosts cut them down. Another highly satisfactory plan when large blooms are desired is to plant out strong rooted cuttings in March in a well-prepared bed or border at the foot of a sunny wall. Of course the cuttings if struck in heat must have been carefully established in pots and hardened off gradually before planting. As nights and mornings in March are often very frosty, some slight protective covering must be given to the young plants until fully established. After the end of April this will be unnecessary. Plant 15 inches to 18 inches apart, and as soon as they are established stop them for the first time, merely nipping out the point of the shoot. If a *Chrysanthemum* be stopped by breaking back a shoot to the hard or hardening wood, it is fatal to its ever producing a good bloom. Shoots so stopped or broken off accidentally are better removed at once, as they always break weakly and badly afterwards. After stopping, leave the two strongest growths that make their appearance, and lead these up straight, nailing them to the wall at intervals, as may be necessary for safety. Carefully pick out all other growths as they appear. After-treatment is simply that recommended as applicable when large blooms are desired from pot plants. Keep off green fly and red spider by frequent syringing, and in all cases remove lateral growths and damaged or weakly growths. Even although planted out in a deep rich border, occasional soakings with soot water or liquid manure will greatly assist growth and future flowers if given during the hot, dry weather. Take off the "July bud" and thin out blooming laterals in August or September, as recommended for pot plants, and very fine flowers will be the result. In the beginning of October run up a light timber framework, being careful to allow sufficient head-room for the plants when in bloom. This may be roofed with any odd spare lights or sashes, and the sides and ends may be closed up on cold nights with either strong canvas or bast mats. This protection will be sufficient to ensure the safe development of the flowers. During fine sunny days abundance of air should be admitted, closing up early if symptoms of frosty nights

appear. Even plants grown in pots, especially for large flowers or for decorative uses, may be protected in this way should no other convenience for housing them exist. The fine show Chrysanthemums inaugurated at the Inner Temple Gardens by the late Mr. Samuel Broome were protected with old lights and matting supported on a rough timber framework as above described. It is precisely this capacity for growth and floral perfection under difficulties that makes the Chrysanthemum above all others the winter flower for cultivators of all descriptions.

A friend writes as follows on Chrysanthemum growing in the open air: "How of the Japanese Chrysanthemums, grown richly (as in Celery trenches, say); leaves kept full and vigorous, and then just as the cold came down, slip a light clear house over them in front of a wall or elsewhere? I have little doubt of a new charm; of course no pots and abundant water, with mulching if need be, and death to spider, etc.? I mean to secure the finest bloom—not merely what one may have out of doors in an ordinary way."

CHAPTER VIII.

EARLY AND LATE FLOWERING CHRYSANTHEMUMS.

THESE early blooming Pompons or summer liliputian varieties are a great gain; even under ordinary hardy herbaceous plant culture in the open border they are invaluable for cut flowers or outdoor decorative uses. They are yearly being more and more improved in size and in colour and have a great future before them. No garden, however small, should be without a few of the best varieties. A good mode of culture is as follows: "Four cuttings are inserted in a 3-inch pot in a compost of cocoa fibre, a little light soil, and plenty of silver sand. I always use plenty of fibre in my cutting pots, as I find that the cuttings root in it quickly. The pots are then watered with a fine rose and plunged up to their rims in cocoa fibre in a cold frame and kept shut up close, which keeps them from flagging. In the time of frost the frames are banked up outside with short litter, and the glass is covered with matting. When the plants are rooted they are potted singly in 3-inch pots in soil made up of a mixture of loam and leaf-mould, instead of the cocoa fibre, with enough silver sand to keep the whole porous. When the plants are about 5 inches or 6 inches high, the extreme point is taken off; this will cause them to throw out some shoots, which in their turn must be pinched when about 4 inches long. As soon as the roots feel the sides of the pots they should be potted into 4½-inch pots, and when established in these pots they should be again pinched. As to the time for final potting and the size of pot for flowering the plants in, all depends upon the size of plant required and also the time when they are wanted in bloom. If the plants are wanted in bloom about the end of June, they should be finally potted not later than the beginning of May, and 6-inch pots will suffice, but of course the plants will not be so large as those that are potted into 8-inch or 9-inch pots and kept pinched till the end of

June. In the spring, after all danger of frost is past, the plants should be placed in an open situation out-of-doors, and carefully attended to as to watering, for if they are allowed to get too dry and flag, they will lose their foliage and look unsightly. After the bloom buds appear, an occasional watering with liquid manure will be of benefit. Care should be taken to keep the plants free from insects, and they should be syringed overhead in the summer at least twice a day. Good plants for window or conservatory decoration can be obtained from cuttings struck from February till April, and grown on as above described. Madame C. Desgrange, sulphur and white, and La Petite Marie, dwarf white, should be grown, both being distinct and good. The following will be found a good collection: Adraestes, reddish purple; Casey, rosy lilac; Chromatella, orange, tipped red; Delphine Caboché, reddish mauve; Durham, yellow; Frederick Pelé, bronze red; Golden Button, small canary yellow; Golden Madame Damage, golden yellow; Hendersoni, yellow; Illustration, fine light pink, changing to white; Jardin des Plantes, white; Jardin des Plantes, yellow; Little Bob, maroon-red; Mme. Pecauly, fine deep rose; Nanum, creamy blush; Précocité, orange-yellow; Souvenir d'un Ami, fine large white, and the different varieties of Cedo Nulli.*

LATE BLOOMING CHRYSANTHEMUMS.—Early blooming varieties of Pompons are a great gain, but scarcely more so than are certain of the large-flowered and Japanese Chrysanthemums which bloom any time after Christmas. Special culture and late pinching may alike be made to favour late blooming, but it is necessary to select the varieties best and most naturally fitted for producing a supply of flowers during January, when flowers as a rule, are scarce, and so more highly to be prized. If once practical cultivators and those who rear seedling varieties will but turn their attention to the production and special culture of varieties for the purpose here indicated, I see no reason why the season of Chrysanthemums should not last from the end of July until the end of March, even if we do not succeed in engirdling the year with their favourite blossoms.

Among the kinds which have been especially alluded to as suitable for late flowering are the following: Nelly, Bouquet, Parfait, Princess Teck, white Incurved; Mr. Gladstone, dark red; Ethel, white Japanese; Saul, The Czar, Julia Lagravère, dark red-brown. Splendens may be had good up to February. Hero of Stoke Newington, a pink sport from Princess Teck; grandiflorum, yellow Japanese; virginale is a good late white Anemone; and old Fleur de Marie is also good; Meg Merrilies is a lemon-yellow or straw-coloured Japanese variety, having long tubular florets gashed open at their apices; this variety gives enormous flowers when well grown, and only opens its blooms about the middle of January; even the small flowers are nice and fringy bits of colour for bouquet work or for vases. Harlequin and Lady Margaret, the former nankeen-yellow, and the latter, a white-flowered Anemone-flowered variety, are both of considerable merit for late bloom. Miss Marechaux, a pure white Incurved variety, with thick, waxy-looking petals, is to be recommended as a January blooming kind. So also Khedive and Lamia and Late Duchess, the latter an intermediate form between the Anemone-flowered

* An article by Mr. W. E. Joyce, of Holloway, in *Gardening Illustrated*.

and the Pompon sections, having pure white flowers, suffused with lemon-yellow in the centre. *Grandiflorum*, a bright canary-coloured Japanese variety, carries on the flowering season well into February. Mrs. Charles Carey, a variety sent out by Cannell in 1880-1, is an excellent late white, somewhat after the style of James Salter. It is most valuable as a Christmas flower.

Late propagation is one way of obtaining late flowers. Cuttings may be rooted in March, April, or even in May. These may be either planted out on the Celery trench system of culture, or arranged outside in pots in May or June. If decorative flowers only are desired, pinching or stopping may go on every two or three weeks until the end of July. As soon as the flower-buds are formed, feed liberally and mulch with rotten manure. By placing them in a north aspect in October and November (protecting from frost with canvas or mats), and so keeping them outside until the buds actually show colour, they may be much retarded. After the blooms actually open, a little fire heat with plenty of ventilation night and day preserves the flowers for a much longer period than does subjecting them to cold treatment indoors, which often induces mildew or damping off.

NEW SINGLE CHRYSANTHEMUMS.—“Single Chrysanthemums find admirers.” So writes one of our contemporaries, and there is no doubt from the interest taken in them when exhibited, that this will continue to be the case, and that they will find as much favour as the single Dahlias. They do not interfere with the florists’ section either in the one case or in the other, and therefore in neither should we hear disparaging remarks about retrograde movements. The elegant single Dahlias bred at Chelsea between *D. coccinea* and *D. gracilis* are not the discarded singles of former days, as some folks seem to think, but a new race in which dwarfness and floriferousness are combined with neat elegant-shaped blooms; and so it will be with the single Chrysanthemums. They will be found to have their uses, and their adoption for these purposes, whatever they may prove to be, need not raise up any opposition to their distribution. These single Chrysanthemums all partake of the habit of growth met with in the Pompons, than which they are still easier to grow. The only difference required in their management is to allow all the bloom buds to remain, for the smaller the flower-heads the more useful are they, and the more highly prized. The single varieties will be found to possess several advantages over the double-flowered sorts for decorative uses. Thus they flower later, and therefore are not so subject to mildew or to damp off. From their open structure the air circulates more freely through the flowers and the sun more readily penetrates the spaces between the florets, so that they hold on more firmly. The flower-heads last fully a fortnight if placed in water after being gathered, and scarcely show any sign of fading within that period. Moreover, many of the varieties throw out lateral shoots which come into bloom at the end of December when flowers are few and precious; and how useful these will prove for decorating the flower vases can readily be imagined. Altogether they have very much to recommend them to notice.

The following sorts, all belonging to what we call the New Departure type, were raised by C. L. Teesdale, Esq., of Chichester:—

“Alice: White, faintly tinted with blush; medium-sized flowers. At-

traction: Quilled florets of medium length, and of a soft rosy lilac colour. Brunette: Deep reddish chestnut, edged and tipped gold. Coachman: Pearly white, medium sized; yellow disc with a green centre, which gives it a striking and effective appearance; dwarf and very free. Dr. Kellock: Silvery pink shaded lilac; pure white at base of each floret forming a distinct white ring; medium sized, well formed flowers. Fair Marguerite: White shaded with blush, slightly tinted with yellow at the base; florets somewhat curled. Gus Harris: Fine dwarf habit, forming a perfect specimen laden with medium sized, well formed flowers of a rosy lilac colour, with distinct yellow disc; quite a gem, and should be included in every collection. Henry Irving: A free-flowering and desirable variety of a beautiful soft rose with silvery shading and clear yellow centre; flowers cupped. Magenta King: Intense magenta, with deep orange centre; florets long. Miss Beckwith: White, shaded with lilac-blush, and broadly tipped with deep rosy lilac; medium sized, lightly cupped; distinct. Miss Cannell: One of the best, the flowers medium sized, finely formed, pure white, with distinct yellow centre, free and effective. Miss E. Terry: One of the finest of the varieties, with long florets of a bright magenta colour and a clear yellow disc; free and fine. Monte Christo: A pretty and distinct variety, deep rosy lilac, with a broad band of pure white round the centre; free. Mr. Toole: Small, well-formed flowers of a clear yellow, very free, distinct and useful. Mrs. Kellock: Large flowers, of a rosy lilac shade, the florets quilled at base of a lighter colour; quite distinct. Mrs. Langtry: A decided acquisition, which will be found very useful for decorative purposes; flowers medium sized, of a pleasing shade of silvery blush; free and effective. Yellow Gem: Bright clear golden yellow, with distinct orange centre; free and showy."

CHAPTER IX.

DISEASES AND INSECTS.

THE Chrysanthemum, being hardy and robust in constitution, is singularly free from diseases. When they are housed or sheltered under canvas in October, however, mildew sometimes makes its appearance. Its origin is by some attributed to very cold nights succeeding sunny days, *i.e.*, to great extremes of temperature. Overcrowding the plants and insufficient ventilation is another fertile cause of mildew. The best of all preventives is to stage the plants thinly, allowing each ample space; give abundance of air and keep a morsel of fire burning, especially on cold, wet nights. It must, however, never be forgotten that it is shelter, not heat, that this flower requires. A flue-heated house is best for preserving the dry atmosphere best suited to the preservation of the blooms. Should mildew actually appear, dusting the affected plants with powdered or flowers of sulphur is the best antidote.

Professor Westwood, writing on the insects which infest Chrysanthemums in the *Gardeners' Chronicle* (1881, p. 537), says: "I regret to find that a very large proportion of my Chrysanthemum plants (on which

I have for some months past been bestowing a large share of attention) have come blind, the tops of many of the shoots having shown a strong and vigorous foliage—too vigorous, in fact, for the development of flower-buds, whilst many have produced imperfect one-sided buds, instead of the fine round ones which should produce the perfect flowers. How far the peculiar weather of the last six months has caused such effects I cannot determine, but I do know that, notwithstanding all my care, insects have abounded on my plants, and I have no doubt that in many instances it is to their agency that my failures are to be attributed. Throughout the early summer months I found the perfect cuckoo-spit insect or frog-hopper very commonly on the young plants, it having been developed earlier in the year from the patches of froth, vulgarly called cuckoo-spit, to be found on many plants, in the midst of which the immature frog-hopper is to be found. The perfect insect is extremely active, springing off the plant on the slightest motion, so that it is very difficult to be captured. Taking its place on the tenderest part of the plant, it inserts its delicate sucker into the young shoots and arrests their growth.

“Later in the summer the earwigs make their appearance, feeding by night on the tender foliage, and concealing themselves on the return of daylight within the buds, their heads being invariably turned towards the innermost part of the buds, and their tails towards the extremity of the curled-up leaves. This affords an easy mode of catching and destroying them. On taking hold of the folded leaf and the tail of the insect between the forefinger and thumb of the right, the alarmed insect immediately raises its head, which may be seized by the nails of the thumb and forefinger of the left hand, and the insect decapitated. I observed the curious fact that it is almost always the case that the depredators are females (easily distinguished by the much smaller size of the forceps at the extremity of the body); with these females were sometimes associated the immature earwigs, and I have taken as many as seven of these insects in the head of a single shoot, their presence being indicated by the minute black granules of their excrement on the surface of the leaves.

“In the *Gardeners' Chronicle*, November 17, 1855, the writer of this article published the description and figure of a species of field or plant bug (*Phytocoris campestris*, fig. 102), which constantly causes much mischief in the autumn to the *Chrysanthemum* buds by inserting the extremity of its delicate rostrum (including four very fine bristles) into the buds, and thereby injuring such of the petals as are in part attacked by preventing them from expanding properly and preventing the so much desired regularity in the bloom.”

This species has been unusually abundant on my plants this year, and with it have been associated several other kinds of plant bugs having precisely similar habits, and being equally injurious to the plants. One of these, nearly as large as the preceding, is of a delicate pale green colour, which causes it to be observed on the plant with difficulty. This species was named *Cimex nassatus* by Fabricius. Another species of smaller size is the *Cimex* (*Anthocoris*) *nemorum* of Linnæus, about $1\frac{3}{4}$ lines long, of a black colour and shining, the wing covers of pale whitish yellow spotted with black or pitchy colour; the apical membrane yellowish white, with the middle and end brownish black, and the legs yellow. It is common on

trees and bushes from June to October, and hibernates among dry leaves. A greater amount of mischief is committed, however, by a much smaller insect, the *Cimex minutus* of Linnæus, belonging to the genus *Anthocoris* and subgenus *Triphleps*. This little insect insinuates itself quite into the centre of the bud, its minute size rendering it difficult to be perceived, although the black colour of its body and the black triangular patch in the middle of its wing-covers render it quite conspicuous when exposed, or when the bud is gently opened. In its preparatory state it is also equally injurious, and is easily distinguished by a large white patch at the extremity of its rudimentary wing-covers. We believe the same insect occurs in North America, where, from its habits, it has been named *Anthocoris insidiatus*.

Besides the foregoing insects I have noticed several others on the buds of my *Chrysanthemum* plants, although of comparative rarity. The common seven-spotted ladybird is one of these, but as this insect is known to be insectivorous, feeding both in the larva and perfect state on plant lice, it may possibly have taken its place on the plant in hopes of finding its usual prey (which has, however, not made its appearance this year on my plants), in the absence of which, I suppose, it would attack the plant bugs above described. The common long-legged harvest spider (*Phalangium* sp.) has also often been found on the heads of my plants, most probably having got there in search of insects on which it feeds. The caterpillar of the dot moth (*Noctua persicariæ*) also has been occasionally met with, and must be looked after sharply, as its delicate green colour with the dark lines on its back render it difficult to be easily detected from its similarity to the folded young leaves of the bud.

CHAPTER X.

LARGE SHOW BLOOMS.

ON the subject of bud selection for large blooms I quote the following in a recent number of the *Gardeners' Chronicle*: "About London cultivators generally are in favour of growing their flowers upon the terminal bud, meaning thereby the bud actually latest in course of development, but not terminal in the sense intended by the botanist, who uses the word in relation to position, not time; while north-country growers prefer the crown bud, or crown terminal, as it is called about Liverpool. Thus, while one set of plants are growing, making wood, the other set are forming and developing flower-buds; a fact which upon the face of it will clearly account for the difference in the size of the flowers.

"In the interests of the uninitiated we will endeavour to explain these technicalities, and start with the cutting taken in the spring, say in February or March. Cuttings are rooted, potted off, and grown upon one stem until July, in the early part of which month a bud will appear which is called the July bud, and which, if taken, is rarely of any worth—at any

rate not as an exhibition flower. In a vigorous growing plant this bud (the terminal bud of the botanist), if it is closely observed after its formation, will be seen to gradually decrease in size, and at the same time three young shoots, at first not much larger than pinheads, will be seen to come away from below its base. As these shoots increase in length the first bud will disappear altogether, and there will now be three shoots to a single stem. In August another set of buds will appear, which, if properly formed, and the vigour of the plant pretty well expended, should be taken, or, in other words, the growth of the plant should be stopped. Immediately upon the appearance of the bud it will be found that three tiny growths are in process of formation at its base, which would develop into shoots, as before explained, and these should be removed at once if the buds are to be retained.

"The next set of buds appear about the first few days of September, and these are what cultivators call the 'terminal buds,' as undoubtedly, in one sense, they are, being the last effort of Nature after the plant has ceased to make shoots. If for the sake of argument we assume that one cultivator disbuds his plants in August, and another one disbuds at a considerably later period, we have a substantial gain on behalf of the former for the process of bud-development. This we consider the simplest way of elucidating the technicalities of the bud business, but the practice is not now generally followed in growing large flowers.

"The system to which we now allude is more intricate in its details, but it offers great advantages to the exhibitor, inasmuch as it gives him a wider selection of buds. It is done in this way. When the plants are about a foot high they are pinched, viz., the extreme points of the shoots are 'rubbed off,' not cut back, as an old hand once sarcastically put it to a young beginner. This early pinching gives a stout stem, and three young shoots break away from the point, all below these being removed as fast as they are formed.

DRESSING THE BLOOMS.—On this subject Mr. Douglas, of Ilford, writes as follows: "Those intending to exhibit cut blooms will find it necessary to obtain dressing tweezers. These are made of ivory, steel, or iron. The ivory tweezers are not quite strong enough to remove the badly-formed petals or green scaly substance that is sometimes to be found in the centre of the flowers, so that steel tweezers will have to be provided for that purpose. The ivory tweezers are used mainly for arranging the petals, but one pair made of steel or iron may be used for both purposes. The large-flowered incurved section is that from which the exhibition blooms are selected, but on careful examination of the various varieties named in this section it will be found that the petals of many of them are irregularly formed, and some of them are badly placed. If we take an incurved bloom as a model, the best for our purpose would be Mrs. George Rundle or the primrose and yellow sports from it. The petals of this variety are sufficiently broad and incurved so as to meet in the centre of the flower, forming what the florist would term a perfect flower; this variety does not require any dressing. John Salter is a large and good flower often seen in stands, but it requires a good deal of manipulation to make it presentable, owing to the number of badly-formed petals in the flowers. It may be added parenthetically that the flowers of this variety and others of the same type

come better formed if they open near the glass roof; the worst of the petals must be removed first with the tweezers, and those that remain must be carefully arranged to meet in the centre. Cherub is another type of flower that requires a good deal of work to make an exhibition bloom; unlike John Salter, which is weak in the centre, this variety is generally too full, so much so, in fact, that the outer petals are thrown back sometimes against the stem; in this case the tufts of small petals in the centre have to be torn out, and the wooden cups are used to draw the flower together. Every one of the blooms must be set up in these cups, which are furnished with a stem to fit into the water tubes; there is also a hole through the stem of the cup through which the flower-stem is passed, and the stem must be wedged in to keep the flower in position. Another fault some incurred flowers have is the tendency of some of the petals to reflex; these have to be brought into position by working them through the tweezers. The outer petals are usually the best, and should, if possible, be carefully preserved; when a number of them are removed by decay or for the purpose of improving the flower the chances are much against such flowers winning in a close competition. I would say to an intending exhibitor, first take every pains to preserve the blooms from damp, and thus save the outer petals until the blooms are fully open; secondly, take Mrs. George Rundle as the model of an exhibition flower, and bring the others up to that form by dressing; and thirdly, let no one go away with the idea that badly-grown flowers can be dressed to beat those that are well grown. Good cultivation must go hand in hand with good dressing to obtain the best results."

"Various opinions," says Mr. Moorman, "will always exist on the propriety of this practice. At the present time it would be useless for any exhibitor to stage a collection of undressed blooms against others of equal size and substance that were dressed. Nearly all societies allow flowers to be dressed, which consists, in the case of an incurred flower, of merely drawing out with a pair of tweezers all short, curled, and irregular florets from the centre of the flower, or any part of the flower in which they can be found. The centre of most flowers will be found shorter than the outside, and by pulling out the short florets a more even outline is produced; the remaining florets are regulated and the blooms placed in hollow wooden cups, in which position they are tightly fastened. One point may here be advanced in favour of dressing, that the more a flower is dressed the smaller the bloom is made; therefore, the more substance the flowers contain the better chance the exhibitor has in gaining the premier position; hence the success of the Liverpool growers over the growers in the neighbourhood of London. The incurred flowers of the former are always of better build and contain more substance than the southern growers appear to be able to obtain."

I am informed on good authority that at the Jersey Chrysanthemum Show no dressing is allowed, each bloom being exhibited as it is grown. Formality is not beauty in the eyes of artistic, or even tasteful, people, and all that dressing can do for us is to give to the florets a slate-on-a-roof kind of regularity—a stiff formality which does not deserve toleration.

CHAPTER XI.

ON RAISING NEW CHRYSANTHEMUMS.

MR. A. FORSYTH writes as follows in the *Gardener's Magazine*, April 20, 1872*: "New varieties of Chrysanthemums are raised by two methods, in one of which Nature takes the lead, and in the other the initiating agent is man. I shall endeavour to describe both methods, so far as I understand them, after many years' experience and observation, during which it has been my good fortune to submit for public approval a few new Chrysanthemums that have acquired celebrity and well rewarded me for my pains.

"In its native country the Chrysanthemum sheds its seeds naturally and new varieties spring up, as they do amongst all self-sown plants. In this country it never does so, and yet Nature kindly takes care that our collections shall be enlarged, for every now and then a sport occurs, and by this means a novelty is secured. It appears that lilac flowers are the most sportive, and that they frequently change to yellow; that is to say, a plant which should produce lilac flowers will some day, to our delight, present one or two yellow flowers in the midst of those of the proper colour. It appears that nearly all the colours are capable of sporting into white; but it would be difficult to establish any rules, for if we may make a fair generalisation from all we know, it may be pretty safely said that any colour is capable of sporting to any other colour—that is, within the range of colours proper to Chrysanthemums.

"All the four varieties of *Cedo Nulli* have sprung from one; the form is the same in all, but the several colours are yellow, lilac, brown, and white. *Bronze Jardin des Plantes* came from the good old yellow variety; the *Queen of England* has sported into six different colours, with some slight change of form too, the *Golden Queen* being the least perfect amongst them. My *Golden Trilby* was a sport from the old white *Trilby*.

"It is not worth while to occupy much space with examples, and I shall not say a word on the philosophy of the change, preferring to confess that, while I am familiar with the facts, I am unfamiliar with their physiological import. The question for the practical man is, having obtained a sport, how to keep it? In order to answer the question satisfactorily, I must be particular in what I say. In the case of a sport really worth keeping, the first business is to notice how many terminal shoots produce it, for sometimes the new flowers come in a bunch, though more frequently they appear singly. Mark the branches and cut the flowers, and take off a few fair-sized cuttings from the wood that produced the new flowers, and strike them in a gentle heat with care. Having done this, cut the plant down, leaving uncut the stems on which the new flowers were produced, to obtain from them a good stock of side shoots during the winter for

* Shirley Hibberd, Esq., in sending me this article at much personal self-sacrifice, says, "You will be glad to hear that the writer of this article, Mr. Forsyth, is doing well in New Zealand, and still sticks to the Chrysanthemum." I am glad to hear this, and so will be all true lovers of the Chrysanthemum.

cutting from in February and March. By this course of procedure you will secure a good stock of plants on which, perhaps, in the following season, the new flowers will appear, but on which the old flowers may appear instead, and you may just discover that, so far as raising a new variety, all your labour has been in vain—'nothing venture, nothing have.' It may happen that the new flowers appear on a sucker from the root, in which case your chance of success is greater than when they appear on the ripe wood; but it is a lottery, and those who enter to win must take their chance of losing. A neighbour of mine had a fine sport of Queen of Anemones a few years ago, and exhibited at the Stoke Newington Exhibition. He raised a good stock from the wood that produced the sport, but he never saw the sport again, the plants producing flowers of the old sort as if nothing had happened to them.

"It would be unjust to the public for any trader to send out a new variety resulting from a sport without first submitting it to a sufficient proof. The instance just cited will show that in this business we must not count our chickens before they are hatched. It is advisable to grow cuttings of sports in such a way as to ensure the full development of all the flower-buds they form, so as to work them right out, and prove them sound to the core—that is, if they are so. Now, to do this, it is advisable to grow them in a poor soil without stopping, and to train them only so much as will suffice to keep them tidy, and to take care to give them no more pot room than is needful for fair growth, but at the same time taking care not to starve them out of constitution.

"Now, we must consider the method which depends on our own initiation, and in which, while we must, of course, wait upon Nature, she will do but little unless we lead the way. The most distinct varieties are raised from seed, and to obtain seed is a most difficult matter. It may be obtained from China and Japan, but is not a regular article of commerce, and it has been grown in quantity in Italy for the French and English raisers, Mr. Salter having been dependent chiefly on Italian seed for the many new varieties it was his good fortune to send into the market. The amateur who may be ambitious of growing his own seed will be disposed to ask for advice on the subject, and happily on that subject I can say something practical. There is but one way to secure seed in this country, and that is, to manage the plants so that they will flower in the spring.

"It will occasionally happen that, amongst a lot of plants that have flowered in the usual way and have been cut down and stored in a pit, flowers will appear in the month of March on buds that were dormant in the previous autumn, and that escaped the knife through being on short shoots amongst the suckers. I remember that, in a report in the *Floral World* some years ago, it was stated that a very fair specimen of lilac *Cedo Nulli* was shown in the school-rooms at Brixton Hill in the month of March, on the occasion of Mr. Hibberd giving a lecture there on the cultivation of the Rose. Now, here we have the whole substratum of the art of raising seed in this country, and will suggest to the ambitious a simple mode of procedure which is likely to result in a very fair production of seed, and, having done so, I will improve upon it and increase its value.

"We will begin with a lot of plants that have been grown to decorate

the conservatory. We will allow them to flower, and so far pay no attention to seed-growing whatever. But the instant they begin to look shabby, we are to resort to measures to encourage seed-production. There must be provided an airy greenhouse or a very light shed, or some such place safe from frost and sufficiently lighted to keep the plants in health all the winter. A dry sunny greenhouse is the proper place for them. They are not to be cut down. No; the faded flowers are all to be clipped off close under the base of each by a pair of scissors or finger and thumb—the ‘cold steel’ to be preferred. Now pack them pretty close, keep them rather dry, and let them have plenty of light and air, and exercise patience. In the course of February and March a lot of flowers will open from buds that were dormant when the proper bloom took place. If you do not get seed from these with the spring sunshine at your command, you will never get seed at all, I fancy, and might as well give up the enterprise as an impossibility.

“Now, we are to improve upon this practice, and the improvement consists in striking cuttings in June, and putting them into $4\frac{1}{2}$ -inch pots as soon as rooted, and shifting them to 6-inch pots about the middle of August. They will probably flower very well in November and December under glass, but they will carry a lot of dormant buds with them into the spring season, and should produce seed in plenty.

“But how about hybridising? you will ask. Permit me, in all sincerity and politeness, to say that hybridising the *Chrysanthemum* is fudge! Take your seed as you can get it, and with it take your chance of the crossing Nature has accomplished for your benefit; but do not suppose that any one less gifted than a magician can manipulate the flowers of the *Chrysanthemum* with the certainty that we operate on the flowers of *Geraniums* and *Fuchsias*. Depend upon it, in the improvement effected by English raisers in the *Chrysanthemum* there has been very little crossing done by means of the camel’s-hair pencil; but no doubt the cross-breeders of the insect world have laboured for our benefit. At all events, if we compare the best *Chrysanthemum* of forty years ago with the best of to-day, the contrast is wonderful, and therefore we may reasonably hope for still further improvements as the reward of our labours.

“The treatment of seedling plants differs from the treatment of cuttings only to this extent, that we want to make sure of their flowering, and care very little indeed about the shape of the plants. Sow the seed as soon as ripe. Pot the plants singly in $2\frac{1}{2}$ -inch pots as soon as large enough, and shift on as needful until they are in $4\frac{1}{2}$ -inch or 6-inch pots, according to their habit and vigour, and in these comparatively small pots let them flower for the first time. You will, if you are wise, or unless you are wondrously lucky, destroy more than 99 out of every hundred of the stock as soon as the flowers appear. Mr. Salter used to say that for every new *Chrysanthemum* that he named and sold he destroyed at least 2000. The amateur will feel this to be discouraging, but the truth must be told, and, after all, a fine thing may turn up amongst a score or fifty seedlings—who knows? More than once in the history of floriculture an amateur has sowed one seed and obtained from it a new and sumptuous variety that has made his name famous.”

In June, 1873, Mr. A. Forsyth, of Stoke Newington, surprised us all

by exhibiting fresh and fully developed Chrysanthemum blooms at South Kensington at one of the R. H. S. meetings. The occurrence of these flowers at such a season was nearly as surprising as it would be to hear the cuckoo at Christmas. There is a tale hanging to these blooms: they were started and grown especially to bloom in early summer, so that seeds might be obtained, for, as is now well known among Chrysanthemum growers, the autumn and winter flowers never produce a single seed. On the other hand, if started late and not allowed to bloom until April or May, seeds are obtainable in England as well as in America, or France, or the Channel Islands. In the United States the climate is especially suitable for seed saving, and ere long we may hope for new varieties, even if not new races, from that country, where the plants bloom quite freely treated as half-hardy annuals.

CHAPTER XII.

CHRYSANTHEMUM SPORTS.

WHEN Mr. Forsyth wrote as above on the Chrysanthemum, he frankly confessed that the causes of the appearance of sports was unintelligible to him. Darwin's works had not then appeared, and botany had not emerged from dusky chaos into the comparatively clear atmosphere of cosmos as some of us are flattered to think is now the case. Graft hybridism had scarcely been recognised as a fact, and the realities of hereditary and reversion were certainly not seen in visions, even if dreamed of in dreams. Now, however, we know that culture and cross-fertilisation for ages will destroy the fixity of any plant. Again, after a plant has had its fixity broken, or after its characteristics become driven from their permanent or fixed condition—their "angle of repose," so to speak—we begin to obtain a multitude of widely varying individuals when we raise plants from seed. In the case of the Chrysanthemum, this is especially the case in a lot of seedlings; no two are exactly alike. Every new generation is like a turn of the kaleidoscope; the elements the same, their arrangement different. Protean variability is an almost constant result of long-continued cultivation on the one hand and cross-fertilisation on the other. Every plant, every individual having life, has two distinct sets of characteristics: firstly, those which are evident and which can be seen; and, secondly, those which are invisible, or latent, but which may at any time break out or become visible under the influence of certain conditions. The visible characters in one generation may become absorbed or invisible, or partially so, in the next. So also the characters of a former generation may again crop out, just as when we hear it said of a child that he resembles his grandfather or some bygone ancestor of his line. This occurs in plants in two ways, either wholly from seed direct, or by a partial change in an individual, when one bud develops a branch differing from its fellows and which is popularly called a "sport." Such "sports" are mainly

originated, and their production facilitated, by culture, aided either by cross-fertilisation or by what is often pretty much the same thing, cross-grafting. Now, if it be true that cross-fertilisation is the cause of variability, one would logically infer that the reverse of variability, or fixity of characters, would result from self-fertilisation, and this much is practically true, for we know that Stocks, Asters, Zinnias, Primulas, and many other flowers can be bred to come true to colour, habit, size, &c., with certainty by ensuring self-fertilisation for several successive generations.

Here is the golden rule for all hybridisers to obtain variety—cross-fertilise, and if a good variety, strain, or race be thus obtained, self-fertilise its best and most robust members in order to “fix” the race, and enable it to be obtained true from seed. This rule holds good with all garden or florists’ flowers, and the finest of results may be gained by practising it with skill and careful labour.

Mrs. Marigold was a remarkable sport, “a complete tasselled Japanese variety with pale pink or flesh-coloured florets,” from Miss Mary Morgan (see *Gard. Chron.* Dec. 25, 1881, p. 19). At Mr. C. Turner’s, of Slough, in 1880, a most remarkable sport appeared on a plant of Mrs. Dixon, half the bloom being of that variety and the other half white, exactly like Mrs. Rundle (*Gard. Chron.* Dec. 4, 1880, p. 731). The florets on the Mrs. Rundle half of the bloom were much broader than those on the Mrs. Dixon, or yellow side of the bloom.

CHAPTER XIII.

CHRYSANTHEMUMS AS CUT FLOWERS.

“WHILE cutting some Chrysanthemum blooms recently,” says a correspondent of the *Journal of Horticulture*, “the thought occurred to me that a note on the varieties which are yielding flowers at this season might be useful. The following gave their first flowers—that is, from the end of the leading shoots—Princess Teck and Mr. Gladstone, both incurved; Fleur de Marie, Miss Margaret, and Empress, Anemone-flowered; Cry Kang, Purple Prince, Japanese; and Julia Lagravère, reflexed. The following yielded a second crop of flowers from side shoots, viz., Lady Slade, Venus, Mrs. Shipman, and General Bainbrigge, large-flowered; Criterion, Tokio, Peter the Great, Elaine, Marie Lemoine, Fair Maid of Guernsey, and Bouquet Fait, Japanese; Beauté du Nord, reflexed; George Sand, Marginatum, and Princess Louise, Anemone-flowered; Baronne du Prailly, Red Dragon, and some of Cry Kang (Japanese) have yet unopened. Of Pompons, Golden Cedo Nulli, Antonius, President, Perle, Madame Montels, and Mustapha afforded flowers for cutting. Four hundred fresh flowers have been gathered this week, 1200 from Christmas week, and we have still many hundreds to gather as required.

“The Chrysanthemum has occupied a very prominent place for several years in the houses here, both as a decorative plant and as a producer of

flowers for cutting, nor has it ever been known to fail to respond to our simple treatment, though I should not recommend so many varieties as we have here to gardeners whose sole aim is to procure flowers for cutting, as I have been placed in this position, that variety and large blooms up to the florist standard were as much requisite as the flowers themselves for furnishing purposes. However, were cut flowers alone a requisite, and plenty of them, the varieties I should select would be these—viz., Mrs. George Rundle, Mr. George Glenny, Elaine, Beauté du Nord, Julie Lagravère, Peter the Great, James Salter, and probably Miss Margaret, for very late blooms. If purple flowers were in request, I would add Prince of Wales and Purple Prince.

“With the exception of the cluster of buds at the ends of the main shoots of some of the varieties, I would allow the plants to bear as many flowers as they could. Rich feeding would bring the flowers to a good size. If small flowers are not objected to, some of the Anemone Pompons might be grown; these are very pretty. Golden Cedo Nulli in its way is quite as beautiful as Mr. G. Glenny. Madame Montels is a lovely flower, and Antonius is also worth growing for cut flowers.

“The cuttings may be struck at any time up to May, but December is the time to insert them if the largest possible quantity of flowers is wanted. I employ very little heat, use short healthy cuttings, and when rooted grow the plants in a cool, airy position. I cannot obtain too strong soil for them, nor press it too firmly into the pots, nor injure the plants with liquid manure, when once the roots have a firm hold of the soil.”

CHAPTER XIV.

CHRYSANTHEMUMS FOR MARKET.

THE Chrysanthemum is peculiarly suited for what is called “market work,” that is, for culture as a decorative plant to bloom in small pots, or for the supply of cut flowers during November, December, and the beginning of January, at a time when they are a particularly scarce commodity, and so all the more certain of sale at a remunerative price. By growing the dwarf early-flowering kinds a supply may be kept up for three months, or even longer; and as almost the entire growth of such plants may be made in the open air, few plants yield a better profit on the outlay for cultural appliances.

“Were Chrysanthemums grown only for the production of exhibition specimen plants and show blooms,” says a writer to the *Gardeners’ Chronicle*, “it is very obvious that the culture of this fine race of autumn flowers would be very restricted. The autumn exhibitions, at which the Chrysanthemum is the chief feature, are, as compared with summer shows, comparatively few, the greater portion relatively being found only in the neighbourhood of the metropolis and in large towns. Still further, these particular exhibitions extend over a very limited period of time, at the most, perhaps, a couple of weeks, and just at the present moment we are in

the midst of the season. A week ago it began, in another week it will end, and the growers of show Chrysanthemums will retire again for another year into seclusion, till the short, but active time of the show period brings them into public notice again. But only the few grow our queen of autumn flowers for exhibition, and the many cultivate her for various decorative purposes. Visits just now to nurseries and to many private gardens, not omitting the famous gardens of the Templars and our public parks, show how the Chrysanthemum displays varied and beautiful decorative qualities—nay, in almost every garden, be it ever so small, we see the favoured autumn flower doing its best to lend beauty when most other flowers have for the season passed away.

“But it is in the market growing establishments, literally huge manufacturing of flowers, that we see the Chrysanthemum in bulk. Here it is grown by tens of thousands, and too often under conditions such as would stagger the humdrum cultivator who has ample glass room at his disposal, and knows nothing of those emergencies which are as familiar to the trade as shifts and privations are to the hungry. We looked in the other day at the Royal Nursery, Feltham, where Mr. Roberts has truly enormous numbers of plants growing under every possible and almost impossible condition. Every inch of space is utilised, whether it be on stage or beneath stage, by the side of walks narrowed now almost to obliteration, and in any and every position there are found Chrysanthemums, both in and out of pots, giving up their beautiful flowers in vast quantities to satisfy the demands of the great flower-loving British public. Of course, we look in vain here for show flowers. One or two growers have devoted houses to their production; not for exhibition, but growing them as show flowers are grown, for sale in the market. That it is not a very remunerative aspect of Chrysanthemum culture is evident from the fact that few care to embark in their production; but, without doubt, in favourable seasons plants grown naturally to produce naturally developed flowers do pay very well, because the Chrysanthemum is singularly amenable to rough and ready treatment when that most critical period of its culture, the blooming period, arrives.

“But the market grower has the advantage of being able to extend the blooming season far beyond the capacities of the show cultivators. The new late summer or true autumn-blooming race of Chrysanthemums open the season in the month of August, and bring it on to the end of October. Then the older strain of what may properly be termed winter blooming kinds begin their season of flower, which is by them carried right on to the end of the year; so that we have a period of five months, the last months of the year, over which Chrysanthemums florally reign more or less supreme. Owing, no doubt, to those market traditions which always favour decided colours in flowers (whether the public is or is not consulted in this matter we know not), we find in this huge collection of Chrysanthemums that whites, yellows, and crimsons predominate. Thus the season opens with early-struck plants of the soft white and compact-habited *nanum* and the clear yellow *Hendersoni*; whilst a handsome addition is being made in *Madam Desgrange*, a near likeness of the most popular *Elaine*; but it is dwarf and early, and under glass very pure and beautiful. Then comes the wonderfully floriferous *Aigle d'Or*, so productive of clear yellow

trusses of flowers: a large patch of this variety of early in the open ground is there cleared without the necessity of making any other plan. Elaine is, of course, most abundant. It is seen not only in the narrow trained law to make pretty little specimens, but in thousands of big ones lifted from the open ground and brought into every available space, and then overflowing into sheds and between the houses, so that all possible shelter may be utilized. It is found that Elaine is a November flower, then in the month of October, when the roses are small and the wind strong and dry. Even 10° of frost have no effect on many plants in the open to the south at this time of the year as I will go to a recent exhibition. Elaine is now the white market flower for competition in the centre of the grower. It is very free, robust, does well, the flowers are of good size, exceedingly pure, and generally elegantly formed. Interesting, indeed, a very marked contrast to the formal rosette known as Mrs. George Burdett, a variety that, once so favoured, has now been relegated to the background, and which has sinned beyond return in colour, often in yellow and sulphur coloured duplicates, which, with their white originals, are yet unpleasantly prominent at exhibitions.

Perhaps next to Elaine in popularity comes the pretty, though very full flowered, Mimi. Mimi, however, is thicker set so near and even, and when well developed the flowers are so pure. It is a capital pot variety, as the large number found in the vegetable 4½-inch pots show. Of the Anemone-flowered section (of these have their admirers) one of the most pleasing of whites is Lady Alexander, the finest blooms of which will come of great size: and when that is the case they are sold individually, whilst in all other cases the blooms are sent in big bunches at prices varying from 8s. to 12s. per dozen. Of all white kinds grown for market, or indeed for any purpose, probably none excel in elegance and rare beauty the pretty feather-edged Marabout. This is a true reflexed or tasselled flower of the finest form, rather small than otherwise, and becoming pure white as it ages, though in its developing stage tinted with pink. Marabout is not a free kind, and its habit is not of the best; but its striking and lovely flowers compensate for other defects. Of yellow later kinds the most favoured ones are Jardin des Fleurs, rich, free, and robust; Chevalier Dumas, bright golden yellow; Peter the Great, pale straw yellow; and Mrs. Dixon—though the latter is mostly grown in pots. Golden Cedo Nulli is also largely grown for the same purpose, as indeed is its older white form, because so dwarf and free.

The bronze section, a line of colour so abundant in the Chrysanthemum, is not largely in request. A few sell well at times, and the most favoured kinds are Barbara and Anemone. Then of crimson hues none excel Julie Lagravère, which is seen everywhere, and is so striking in its rich crimson colouring. Cut in large quantities for bunching, it then becomes wondrously effective, whilst in the garden its brilliant hue is intensified. Dr. Sharp, too, is a very useful and striking kind, though not nearly so free. Of all the intermediate lines, few are more pleasing than is the rosy lilac Adèle Presette, a variety that has a neat dwarf habit, and produces compact trusses of flowers admirably suited for bunching. Of course, late kinds make just now little display. The very latest is the pure white Fleur de Marie; for though so dwarf and full of growth, the

flower buds are but just forming, and may be expected to expand about Christmas. Another good late sort is Princess Teck, so well known as a Christmas decorative kind. It is in the production of late or true winter bloomers to which raisers should direct their attention. Kinds that will help to extend the blooming period through the gloomy month of January will, indeed, prove invaluable, not only to the general grower, but specially to the producer for market."

CHAPTER XV.

SELECT CHRYSANTHEMUMS.

A GOOD selection of decorative varieties is a great want on the part of amateur growers. Mr. Samuel Barlow, writing in the *Gardener's Magazine*, says, "For the guidance of others I add a list of the plants I have selected and am growing for the coming season's bloom. I have discarded many well-known varieties for their habit of growth, mainly because they are too weak to support the blooms in an erect position; such are Prince of Wales, Dr. Brock, Beverley, and others. The selection is based on twenty years' experience in growing the Chrysanthemum, carefully noting them each season. The number of plants of each variety indicates the relative positions which they hold in my estimation. The list is fairly representative, and includes all classes and colours, except the very early bloomers:—

Incurved varieties.

10 Mrs. George Rundle	4 Lady Talfourd
6 George Glenny	4 Jardin des Plantes
6 Mrs. Dixon	3 Princess Teck
6 Pink Venus	3 Hero of Stoke Newington
6 Blonde Beauty	2 Lady Slade
6 Barbara	2 Beethoven
6 Empress of India	2 Lady Hardinge
4 Antonelli	2 Prince Alfred
4 Nil Desperandum	2 Little Pet
4 White Eve	2 Queen of England
4 Golden Empress of India	2 Golden Queen of England

Recurved varieties.

6 Sœur Melanie	2 President or Dr. Murray
4 Progne	2 Ariadne
4 Julie Lagravère	2 Jewess
2 Dr. Sharpe	

Japanese varieties.

10 James Salter	2 Fair Maid of Guernsey
6 Elaine	2 Ethel
2 Peter the Great	

Pompons.

6 Mrs. Dix	3 Golden Sainte Thais
6 Argentine	3 Aurora Borealis
4 Model of Perfection	3 Snowdrop
4 Saint Michael	3 Miss Wheeler
3 M ^{de} me. Marthé	2 White Cedo Nulli
3 Golden M ^{de} me. Marthé	2 Golden Cedo Nulli
3 Bob	2 Lilac Cedo Nulli
3 Sainte Thais	

Large Anemone-flowered.

2 Glück	2 Miss Margaret
4 Fleur de Marie	

Anemone-flowered Pompons.

4 Madame Montels	3 Antonius
4 Jean Hachette	3 Mr. Astie
4 Dick Turpin	2 Marie Stuart

THE BEST INCURVED, OR LARGE-FLOWERED CHRYSANTHEMUMS.

The following list is the result of a Chrysanthemum election in which many good growers took part, so that the results, as shown by the number of votes each variety obtained, may be taken as approximately correct. It was originally prepared and published in the *Journal of Horticulture*, 1883, p. 110:—

RESULT OF THE POLLING.	1st Class Votes.	2nd Class Votes.	Total.
1. Prince Alfred	61	13	74
2. Golden Empress of India	64	9	73
3. Princess of Wales	65	7	72
4. Empress of India	65	6	71
5. Jardin des Plantes	45	25	70
6. Queen of England	50	19	69
7. Barbara	37	30	67
8. Princess of Teck	27	39	66
9. Hero of Stoke Newington ..	41	21	62
10. Mrs. Heale	41	17	58
11. Mr. Bunn	31	25	56
12. Lady Hardinge	25	31	56
13. John Salter	41	11	52
14. White Venus	17	32	49
15. Refulgence	32	15	47
16. Nil Desperandum	18	27	45
17. Mrs. G. Rundle	26	18	44
18. Prince of Wales	15	28	43
19. Alfred Salter	26	16	42
20. Venus	9	27	36
21. Mrs. Dixon	11	21	32
22. Cherub	8	24	32
23. Mr. G. Glenny	8	21	29
24. Princess Beatrice	5	24	29
25. Lady Slade	6	22	28
26. Bronze Jardin des Plantes ...	6	21	27
27. White Globe	7	17	24
28. Novelty	7	16	23

BEST INCURVED CHRYSANTHEMUMS—*Continued.*

RESULT OF THE POLLING.	1st Class Votes.	2nd Class Votes.	Total.
29. Mr. Brunlees	6	16	22
30. White Beverley	8	13	21
31. Golden Queen of England ...	11	9	20
32. Eve	7	13	20
33. Isabella Bott	6	14	20
34. Mrs. Haliburton	6	14	20
35. Baron Beust	5	15	20
36. Golden Beverley	4	15	19
37. Empress Eugénie	7	10	17
38. Lord Derby	5	12	17
39. Emily Dale	6	10	16
40. Beauty	5	10	15
41. Mr. Howe	11	3	14
42. Mrs. Shipman	3	11	14
43. Miss Mary Morgan	5	7	12
44. Guernsey Nugget	5	7	12
45. Lady Talfourd	1	10	11
46. Pink Venus	3	7	10
47. Beverley	0	10	10
48. Pink Perfection	2	7	9
49. St. Patrick	1	8	9
50. Mabel Ward	2	6	8
51. Sir Stafford Carey	2	6	8
52. Blonde Beauty	2	6	8
53. Golden Eagle	0	8	8
54. Lord Wolseley	6	1	7
55. Mr. Gladstone	4	2	6
56. Incognito	2	4	6
57. Antonelli	1	5	6
58. Golden John Salter	1	5	6
59. Mr. Cullingford	2	3	5
60. Beethoven	0	5	5
61. Angelina	0	5	5
62. General Bainbrigge	0	5	5

CHAPTER XVI.

NOTES ON FRENCH SEEDLINGS.

THE following notes on French seedlings have been kindly furnished by M. Victor Lemoine, the well-known nurseryman and hybridist of Nancy: "I am not actually a raiser of Chrysanthemums, although I grow them rather extensively for commercial purposes, and have sent out some seedlings of merit. One of our earliest raisers of this popular flower was the late M. Lebois, of Toulouse. He it was who effected such a marked improvement in the Pompon or Chusan Daisy race, and the late M. Miellez, a nurseryman of Lille, introduced them to the trade. Since the death of these two enthusiasts this small-flowered race has been somewhat neglected, although Madame Lebois for some years after her husband's death continued to raise seedlings, which she

sent to the late M. Verschaffelt, of Ghent, and several of the finer kinds were figured in *L'Illustration Horticole*. *Bona-fide* raisers who have most distinguished themselves since that time are M. Pertuzes, of Toulouse, and M. Boucharlet aîné, of Lyons, both of whom have sent out some desirable early blooming varieties. M. Charles Huber, of Hyères, for some time turned his attention to raising seedlings, and sent out some good kinds. Some twenty years ago Messrs. Bonamy frères, of Toulouse, effected considerable improvements, but nearly all the raisers above mentioned are now replaced by others, of whom the following are most worthy of note: M. Lacroix, of Toulouse; M. Boucharlet aîné, of Lyons; M. Schwartz, of Lyons; M. Bernard, of Toulouse; M. Marrouch, of Toulouse; M. de Reydellet, of Valence; and above all by M. Délaux, of St. Martin du Couch, near Toulouse. M. Délaux has been most fortunate, and his seedlings continue to improve year by year. One great fault may be found with the southern raisers: They secure fine varieties, but as but little attention is paid to constitutional hardihood, it is often disappointing to find that they do not bloom well in cold localities. The first of the early Pompon race were raised in Paris by the late M. Pelé."

NEW FRENCH CHRYSANTHEMUMS, 1882.—The Chrysanthemum as a florist's flower was never more popular than it is to-day; as a decorative plant it is more and more extensively cultivated every year. Chrysanthemum exhibitions, the fine displays made in the Temple Gardens and in sundry of the London parks during the autumn months, have shown how easy it is to have a conservatory gay with flowers during the dulllest and most foggy time of the year. Quite recently I have read that one of the large conservatories in the Royal Gardens at Frogmore was last season made very attractive by means of hundreds of Chrysanthemums, all of which is most encouraging. In no other country is the Chrysanthemum so well grown as in England, near Liverpool and in London especially, but it is to some of us a source of regret that while we cultivate this plant so well nearly all the new kinds are imported from the Continent, and we hope for the time to come when every grower will save seed and raise a few new seedlings every year. As it is, most of the new varieties are raised either in the Channel Islands or in France. With regard to those from France I am indebted to M. Lemoine, the well-known horticulturist of Nancy, for the following select list of kinds recently sent out.

1. EARLY-FLOWERING VARIETIES (viz., those which flower from October 15 to November 15).—Alexandre Dufour (Délaux), Japanese, full flower of a rich violet colour; Amarantina (Délaux), Pompon, perfect in shape, purple-amaranth with white points; Curiosité (Boucharlet), Pompon, poppy colour with gold centre; Etincelle (Lacroix), Japanese, very large and very dark crimson tipped with gold; Ile Japonnaise (Délaux), large and very full petals curled, violet-rose with a light silver tint; Mdle. Lacroix (Lacroix), Japanese, rosy white changing to pure white; Mdle. Maney (Délaux), Pompon, very full, delicate rose, the reverse of the petals tinted silver.

2. POMPONS.—Apothéose (Lemoine), flowers full, purple-carmine; Arbre de Noël (Lemoine), flowers very full, brilliant orange tinted with scarlet; Laïs (Lemoine), flowers of medium size, sulphur tipped with

gold ; La Mascotte (Lemoine), flowers full, reddish brown and violet ; La Traviata (Délaux), flowers brownish red, tinted with dark scarlet ; Lavinia (Lemoine), flowers middle-sized, light violet ; M. Robillard (Délaux), late flowering, lilac-rose edged with white ; Séduction (Lemoine), flowers full, reddish brown ; Volcan (Lemoine), flowers small, mahogany red.

3. LARGE-FLOWERED VARIETIES.—Gloire Lyonnaise (Boucharlat), flowers middle-sized, piped petals, centre white, with reddish brown tips ; Grenadière (Boucharlat), flowers large, garnet-red pointed with gold ; Jeanne d'Arc (Lacroix), flowers snow white, reverse of the petals lilac ; Mdle. Croizette (Lemoine), flowers dark rose, changing to delicate rose ; Mdle. Madeleine Tezier (De Reydellet), late flowering, perfect in form, snow white, flowers in bouquets ; Tragédie (Lemoine), flowers full, violet-rose ; Vereschagine (Lemoine), dark rose spotted with purple.

JAPANESE.—Admiration (Lacroix), petals long and tubular, delicate lilac, turning pure white in the centre ; Fr. Délaux (Délaux), flowers very large and full, crimson-red, tinted with fiery red, centre curled, reverse golden ; Général de Lartique (Délaux), flowers very full, petals curled, fiery red, reverse yellow ; J. Délaux (Délaux), flowers full and very large, dark brown, tinted with crimson, reverse gold. Among the Japanese varieties sent out in 1882 several did not flower. This list will be interesting to our own growers, and allow me to suggest that as the same name is now applied not unfrequently to very dissimilar varieties, the *bona-fide* raiser's name be added on the labels of all exhibited plants, as is generally done in the case of the Auricula.

JERSEY AND GUERNSEY VARIETIES.—The following is compiled from original notes and lists kindly furnished by a noted Chrysanthemum grower in Jersey : " Having resided in Guernsey for twenty years, during which time the Chrysanthemum has been an especial favourite of mine, I may say I am personally acquainted with all the raisers in that island, and have seen some thousands of seedlings, some exquisitely beautiful, others, alas ! not so attractive from a florist's point of view, and so doomed to be cast aside. The raiser of the first seedling Chrysanthemums in the Channel Islands was a baker, the plants being trained to a wall behind his oven. The varieties of that time were, of course, very different from those raised more recently in Guernsey by such men as Clark, Davis, Pethers, and Smith. Mr. Smith has sold as many as sixty new varieties in one year to the late Mr. James Salter, of Hammersmith. These were named and brought out a few at a time, so as not to overstock the market. In Mr. Salter's catalogue a number of them are marked Smith, while many are marked S only. I recently paid a visit to some old friends in Guernsey, and while there, speaking of Chrysanthemums, they seemed unanimous in thinking that by far the greatest number of the large-flowered varieties in Salter's list were of Guernsey origin bought from the stock of unnamed seedlings. Crimson Velvet was first exhibited by Pethers, and is still one of the best of rich dark-coloured kinds. Among the modern Japanese varieties several have been raised by Major Carey's gardener, while those two favourites, Elaine and Fair Maid of Guernsey, were raised by Mr. J. Downton, gardener to Mr. Saumarez Carey, of The Grange. The Pompons under the head " Jersey " in the list annexed were sent by M.

V. Langlois and myself to Mr. A. Forsyth, who then lived at Stoke Newington. They were mostly of French origin. Dick Turpin is a Jersey seedling named by the judges at our fourth exhibition, it having been given by the raiser to his postman, J. Turpin. Major Carey now seems almost alone here as a raiser of new kinds from home-saved seeds.

As to seed-saving, I have observed two methods of treating the plants. A common plan is to train the plants to a sunny wall, protecting them above by a weather board. Here they are left to ripen until the end of January, when the old flower-heads are cut off and the seed separated and saved by rubbing them in silver sand. Others are grown to single stems in pots placed in a greenhouse. February is the best time for seed-sowing, but Mr. Beckford tells me he has sown as late as April, and even then has had blooms the same year. Some years ago I tried the Chrysanthemum seeds advertised by different seedsmen, but never could obtain from them a variety worth keeping; indeed, they resembled Ox-eyed Daisies more than anything else. Not having attempted raising seedlings of late years, it is quite possible that the seeds now advertised are of better quality. Mr. Chas. Smith, of the Caledonian Nursery, once told me that he regretted having thrown away many single and semi-double varieties that would now be gladly purchased, although totally unappreciated at the time he had them growing and in bloom.

AMERICAN CHRYSANTHEMUMS.—Dr. Walcot, of Boston, Mass., has sent me cut flowers of a few of his seedling Chrysanthemums, some of which are very distinct and beautiful. It is also rather surprising to find that these flowers have so much endurance, that they reached me after their voyage of 3000 miles almost as fresh as when cut from the plants. The mode of packing especially deserves notice, as being both simple and effectual. Each flower or truss was cut with 6 inches or 8 inches of leafy stem. A little moist cotton wadding had been placed around the severed stem at its base, this being surrounded by a small piece of sheet india-rubber to prevent the wadding from drying too quickly. The flowers and stems so treated were packed in tissue paper in a tin box, the cover or lid of which was hermetically sealed by a film of sheet rubber.

The flowers themselves vary from perfectly single to good double blooms, the colours being singularly brilliant and effective. Two only of those sent are named, these being Robert Walcot, a Japanese kind of a vivid crimson-red tint, each floret being yellowish behind, and George Walcot, a bold flower, with flat or ribbon-shaped florets of a pale rose colour, edged with rosy crimson. No. 3a is a pure white flower in the way of White Princess; and a vivid dark crimson Pompon variety, having a yellow centre in the midst of its densely-crowded florets, is quite distinct from anything we have seen before. The single varieties are very bright in colour, and have an elegance of form quite wanting in the double kinds. Dr. Walcot is an amateur cultivator, and will, we hope, be still further rewarded in his culture of the Chrysanthemum. He is, if not actually the first, at least one of the first, of American growers who have treated the Chrysanthemum as an annual by raising fresh batches from home-saved seeds every spring. It does not appear to

be generally known that seed sown in February and grown on with the treatment usually given to cuttings will produce flowering plants in nine or ten months. This is, however, a fact, and one which we hope our own growers will speedily realise for themselves. Although some of the earliest of seedling Chrysanthemums ever obtained in Europe were raised at Oxford many years ago, yet nearly all the kinds now cultivated have been raised in the Channel Islands or in France. The late Mr. Salter used to purchase numbers of unnamed seedlings from the Guernsey growers in his time, and even to-day most of the new Japanese varieties are raised in the Channel Islands. The Pompons and the early or summer-flowering races originated in France, and it is from France that most of the new varieties of these still come to us. These beautiful flowers from Dr. Walcot, however, lead us to hope for great things from America in the way of new seedling Chrysanthemums. In the way of incurved or show flowers, perhaps the old kinds may never be beaten, and wonderful as they are from some points of view, they do not lend themselves very gracefully to artistic purposes, or suit well for decorative uses. As flowers for personal ornament, they are not generally admired. For one lady who will wear blooms of Mrs. G. Rundle, or its sulphur and yellow forms, we find twenty who prefer Elaine or Peter the Great, or who content themselves with the fringed and tasselled Japan kinds. At the same time we decry no particular form. Give us vivid colour; give us variety, elegance of form, and perfume if you can (such as Progne already possesses); in a word, let all tastes be consulted, let all wants be satisfied. There is here a wide and open field for improvement and progress, and the results Dr. Walcot has obtained in his New Jersey garden are so far most encouraging. We now more especially desire large-flowered kinds for early blooming out of doors, and even more valuable would be varieties to bloom naturally during January and February. Dr. Walcot has quite recently (Nov. 7) been awarded prizes and certificates of merit for some of his Chrysanthemums in New York, and we cannot do better than let him tell us how he began the raising of the popular flowers. "I began the raising of seedlings some few years ago. Finding that I could procure seeds by keeping my house quite dry, and by giving water to the plants themselves very sparingly, I made some attempts at cross-fertilisation, and am satisfied that I have gained nothing by them; even at this time of the year it is very difficult to keep insects out of my houses, and, with a careful selection of proper plants, I fancy that they will distribute the pollen better than I could hope to do. Growing Chrysanthemums, as I do, for the pleasant occupation of the few leisure hours of a busy life, I have not given them to the trade—they are in the hands of my friends; nor have I done more than exhibit some of them at horticultural shows at Boston and once at New York, when they received medals and certificates of merit. Some of my more recent seedlings are to me so satisfactory, that I am going to send you a few for your opinion." These flowers were sent from Boston on November 24, and reached me on the 5th of December quite fresh, and nearly as beautiful as when cut from the plants. Dr. Walcot also informs me that Mr. John Thorpe, a nurseryman near New York, has also raised this year some seedlings of unusual promise, and with this exception but little or nothing seems to

have been effected in *Chrysanthemum* improvement from American saved seeds. The following is a list of such of Dr. Walcot's seedlings as have been exhibited, and to which awards of merit have been made :—

Seedlings of Dr. H. P. Walcot's raising, 1879—1883 : President Parkman (Japanese), plant of robust, compact growth, flowers full, bright rosy purple; President Hovey (Japanese), flowers large, spreading, brown, with salmon tint, white at the insertion of the florets; President Wilder (Japanese), florets red tipped, gold reverse, gold centre, bright yellow; Pontiac (Japanese), same habit and growth as President Parkman noted above, flowers full clear canary yellow; H. L. Higginson (Japanese), flowers medium sized, floret tubular, yellow-brown, extremities flaring and brown-red; Savannah, small flower, brilliant red, bright yellow centre; Hiawatha (Chinese), incurved, rose-violet, with lighter back, good form; Minnehaha, large white flower, backs of petals slightly tinted with pink, finely incurved; George Walcot (Japanese), seedling of 1882; Robert Walcot (Japanese), seedling of 1882. The other flowers in box are from seedlings of 1883.

Two points of especial interest are worthy of note in connection with the above communication. Firstly, we find that a definite and successful beginning has been made in America, and that really fine varieties of *Chrysanthemums* are now raised there from home-grown and home-saved seeds. Secondly, Dr. Walcot's box of flowers arriving as they did in such perfect freshness and beauty proves to us at once the possibility of a cut-flower trade springing up between England and America, or at least that an interchange of cuttings and fresh specimens may be carried on for horticultural and scientific purposes.

On the same subject Mr. Thorpe, of New York, writes to me as follows. The subject is *Chrysanthemums*: "I have the past year or two been raising seedlings, but not until this season (1883) has it been satisfactory to me. A year since I determined to go to work in such a manner as to demonstrate what could be done by strict attention to fertilisation. I selected as seed parents Mrs. C. Carey, Fantaisie, and a variety semi-double Japanese seedling. For pollen parents I used Bras Rouge, Fulton, Fleur Parfait, and Katakanka; the result was enough seed to give me nearly 400 plants, of which over 375 flowered this October and November. The seed was sown the 1st of January, 1883, before eight o'clock in the morning, and I think I began the year well, for out of the lot I must save over 80. How does this compare with Forsyth's statement of Salter not saving over 5 or 6 out of 2000 or 3000? The most remarkable part of the thing is that from these crossings I have every imaginable type of *Chrysanthemum* known—and some not known—in the following proportion: 8 or 10 Pompons every type, 6 hybrid Pompons (*sic*), a few Chinese reflexed flowers, and a few incurved Chinese, the balance being Japanese. There are among these some of the most lovely single flowers with one ray of petals, others with 3 and 4 rays, others with 5 to 7, of all shades, of all shapes, and of all sizes, some as smooth as single Dahlias, others with petals twisted and curled like ostrich feathers. I shall send you in a few days report of those shown by me at New York, when you will see something about their forms. But what I want to know after such a positive trial is, where are the

species? Depend upon it, they are all mere varieties rather than referable to 3 species. If *Gaillardia Lorenziana* had been found in our Western States in company with *G. picta* and *G. aristata*, it undoubtedly would have been dubbed a species, and this is only one of the hundreds of wide variations originated in gardens."

CHAPTER XVII.

HINTS ON EXHIBITING.

Cut blooms that are intended for exhibition will keep fresh longer and look better if cut the evening before the show and placed in cups of water on a cool, moist cellar floor. Intending exhibitors must be especially careful "to read, mark, learn, and carefully digest" the words and meaning of the schedule and regulations of the exhibition or society offering prizes. If the slightest doubt is felt, call upon or write to the secretary of such exhibition or society at once, and gain a clear idea as to what is meant, or disappointment may result, owing to your having unconsciously shown in a wrong class; or you may be disqualified for showing "clusters of flowers as grown" instead of the three best flowers, "clusters or bunches of three," you have on all your plants. The following notes from the *Journal of Horticulture* will explain what is to be guarded against: "At a recent exhibition a class was provided in the schedule for 'twelve Pompons, not less than six varieties, to be shown in bunches of three, with foliage.' The chief prize was awarded to an exhibitor with three individual flowers of each variety. The second prize was awarded to another who staged three trusses of each variety, each bunch of three trusses probably containing over a dozen individual blooms. According to the reading of the schedule, ought not the latter stand to have been disqualified? We state this question in order that our reply may be better understood and of more service generally, as the subject has much more than a personal significance. The second-prize stand referred to could not have been disqualified, as 'bunches' certainly were staged—a 'bunch' meaning a cluster. A number of the same kind growing together, or a number of stems containing single flowers tied together, would form a bunch. In the Kingston schedule the stipulation is 'twelve bunches of Pompons, distinct, three stems as cut to form a bunch (Anemone, Pompon, and hybrids excluded). Mr. Moorman was rightly adjudged the first prize in this class, each of the stems having six or more fine flowers. According to the extract from the schedule first referred to, the judges might, perhaps, have disqualified the first-prize stand, as blooms, not bunches, of three varieties were staged, but they, no doubt, as judges usually do, exercised their discretion in reading ambiguous conditions. According to the Kingston schedule, they could neither have disqualified bunches of three single blooms as cut from the plant nor bunches containing several blooms on one stem. Whatever is meant by committees should be stated. Either 'three single blooms to form a bunch,' or 'three bunches of flowers as cut, number of blooms not limited,' would make the matter plain to all."

CHAPTER XVIII.

CHRYSANTHEMUM SOCIETIES.

CHRYSANTHEMUM culture is very frequently fostered and improved by the aid of local societies that are specially devoted to the end in view. It enables cultivators to meet each other in friendly rivalry; new flowers are brought forward; the merits of these, as of older kinds, for certain purposes are brought out and discussed; and visitors to these shows not unfrequently are led to take up the culture of this popular flower by seeing well-grown plants or cut blooms who would otherwise never have thought of it except as a miserable bush tied up to a fence in the open air, or starved and poor in a pot in the greenhouse. The Chrysanthemum is literally the last show flower of the waning year, and deserves notice as coming at a time when decorative plants in bloom are scarce. Wherever two or three or more growers are found in any district, a Chrysanthemum society should be formed, and the interest of the exhibition may well be augmented by holding a fruit and vegetable show in conjunction with the exhibition of Chrysanthemums. The formation and organisation of such a society must be taken in hand by growers and admirers of the Chrysanthemum themselves in this way. They must band themselves into a working committee, and then some nobleman or gentleman popular in the locality must be solicited to allow his name to appear as president, and eighteen or twenty gentlemen who have good gardens must be induced to become vice-presidents. Lady patronesses, treasurer, and hon. secretary must likewise be secured. A subscription list must be opened, and subscriptions solicited from ladies and gentlemen who have gardens in the locality, or who are known to be fond of horticulture. Make up your mind to give money prizes, if possible, and nothing conduces more to the long life and prosperity of a flower show of any kind than prompt payments of prizes on the very day the awards are made. The following are the rules of the Kingston and Surbiton Chrysanthemum Society, and may serve as a model for others. In districts like Kingston, Camberwell, Stoke Newington, Highgate, and other suburbs of London, and near Liverpool, where the Chrysanthemum is even more popular, a few extra classes should be added to the schedule here given. Thus prizes might well be offered for the finest new flower or variety of the season in each class or section—Incurved, Pompone, Japanese, Anemone, twilled, reflexed, &c. A special class should be made for seedling kinds raised by the exhibitor. Another for best bridal bouquet of Chrysanthemum flowers (foliage *ad lib.*), best ball-room ditto, and for a vase arranged for the drawing-room. An interesting class might be made for dwarf plants bloomed in 6-inch pots, grown from tops of plants struck late.

The rules and regulations for the exhibition itself must be clear and explicit, and it is the duty of the committee to see that they be carried out by the exhibitors. A little supervision on the morning of the show on the part of one or two members of the committee will often prevent

errors on the part of new exhibitors, who in all cases deserve encouragement. The following regulations are those of the society just named :—

I.—All productions entered for competition must be in the place of exhibition by 9 a.m. on the first day of the show, and each correctly named and placed ready for the judges by 11 a.m., at which time the building will be cleared.

II.—No exhibits entered for competition to be removed before 10 p.m. on the second day of the show.

III.—The judges will be empowered to withhold prizes where the productions exhibited are by them considered below the standard for the lowest prize, and their decision shall be final.

IV.—All cut blooms must be shown on boards of the following dimensions, viz. : boards for six, 1 foot long by 18 inches wide, and 3 inches high in front and 6 inches behind; boards for twelve, 2 feet long by 18 inches wide, and 3 inches high in front and 6 inches behind; boards for twenty-four, the same width, but double in length. Labels, on which the names of all cut blooms must be written, will be supplied by the secretary.

V.—No exhibitor will be allowed to compete in two classes for the same thing, or with the same letters, or take more than one prize in a class.

VI.—Any protest must be entered during exhibition hours, and in the event of disqualification the prize shall be awarded to the next exhibit in order of merit, if considered worthy.

N.B.—Any exhibitor not complying with these regulations will be disqualified.

A printed schedule of classes and prizes offered, together with rules and regulations, and a printed form for the exhibitor to fill up (specifying number and description of his proposed exhibits therein) should be forwarded to all exhibitors in the locality. For the sake of neatness and uniformity all boxes or stands for cut blooms should be of the same dimensions, and all names should be written clearly and neatly on cards provided by the society.

RULES OF A CHRYSANTHEMUM SOCIETY.

I.—That the object of this society shall be to encourage the cultivation of the Chrysanthemum, and other autumnal flowers and fruit, by holding annual exhibitions, or in any other way deemed expedient.

II.—That the business of the society shall be conducted by the president, secretary, treasurer, and a committee of fifteen members, with power to add to their number, five to form a quorum; such committee to be chosen annually at the general meeting of the society, to be held in December.

III.—A subscription of 2s. 6d. shall constitute membership, and entitle the member to one admission ticket and to exhibit in one class; subscribers of 5s., two tickets and to exhibit in four classes, an entrance fee of 1s. being charged for each additional class; subscribers of 10s., to four tickets and to exhibit in all classes; subscribers of 20s. and upwards, to six tickets and one pass, and to exhibit in all classes.

IV.—All productions must have been in the possession and under the cultivation of the exhibitor for at least three calendar months prior to the date of the show.

V.—Each exhibitor shall give notice of the class or classes in which he intends to compete, by filling and returning to the secretary the accompanying form, at least five clear days before the day of exhibition.

VI.—The full amount of prizes offered will be paid if the funds of the society will admit; but should they prove insufficient, they will be paid in proportion to the funds.

SCHEDULE OF PRIZES.

Class.	1st Prize.	2nd Prize.	3rd Prize.	4th Prize.
1 For the best Group of Miscellaneous Plants, arranged for effect, to occupy a space not exceeding 100 square feet	60s.	40s.	30s.	20s.
CHRYSANTHEMUMS IN POTS.				
2 For the best Collection of Plants to be shown as grown, to occupy a space not exceeding 50 square feet; quality and general effect to be the leading features in this class	50s.	40s.	30s.	20s.
LARGE FLOWERING VARIETIES.				
3a Six trained specimens with single stems, distinct varieties. First Prize—Silver Watch, value ...	84s.	30s.	20s.	
4a Three do. do.	20s.	15s.	10s.	
5 Three standards do.	20s.	15s.	10s.	
6 Single trained specimen	10s.	7s.	5s.	

The Chrysanthemum.

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POMPON VARIETIES.

Class.		1st Prize.	2nd Prize.	3rd Prize.	4th Prize.
7b	Six trained specimens with single stems, distinct varieties	30s.	20s.	10s.	
8b	Three do. do. do. ...	15s.	10s.	5s.	
9	Three standards do. do. ...	15s.	10s.	5s.	
10	Single trained specimen	7s.	5s.	3s.	

CUT BLOOMS.

11c	Twenty-four Incurved varieties, distinct. First Prize—A Timepiece, value	84s.	30s.	20s.	10s.
12c	Twelve Incurved varieties, distinct... ..	20s.	15s.	10s.	5s.
13c	Six do. do. do.	10s.	7s.	5s.	
14	Six do., open only to those who have never taken a prize for Chrysanthemum blooms	10s.	7s.	5s.	
15d	Twenty-four Japanese varieties, distinct. First Prize—A Timepiece, value	84s.	30s.	20s.	10s.
16d	Twelve Japanese varieties, distinct	20s.	15s.	10s.	5s.
17d	Six do. do. do.	10s.	7s.	5s.	
18	Six do., open only to those who have never taken a prize for Chrysanthemum blooms	10s.	7s.	5s.	
19	Twelve Reflexed, not less than six varieties	15s.	10s.	5s.	
20	Twelve Anemone-flowered, not less than six varieties	20s.	15s.	10s.	
21	Twelve bunches of Pompons, distinct, three stems as cut to from a bunch.* First Prize—A Timepiece, value 21s. (see Special Prizes)		7s.	5s.	
* Anemone Pompons and Hybrids excluded.					
22	Twelve bunches of Anemone Pompons, not less than eight varieties, or more than two of one variety, three stems as cut to form a bunch	10s.	7s.	5s.	
31	Six Chrysanthemums in pots, distinct	15s.	10s.	5s.	
32f	Twelve Chrysanthemum Blooms, not less than six varieties, Pompons excluded	10s.	7s.	5s.	
33f	Six do do. three do. do.	5s.	3s.	2s.	
34	Six Japanese Chrysanthemum Blooms, distinct	5s.	3s.	2s.	
35	Six bunches of Pompon Chrysanthemums, three spikes as cut to form a bunch	5s.	3s.	2s.	

Classes 31 to 35 open only to Amateurs in the Kingston Poor Law Union, who do not employ a gardener on more than one day a week.

36	Six Chrysanthemums in pots, distinct	15s.	10s.	5s.	
37	Single Specimen do.	5s.	3s.	2s.	
38g	Twelve Chrysanthemums Blooms, not less than six varieties, Pompons excluded	10s.	7s.	5s.	
39g	Six do. do. three do. do.	5s.	3s.	2s.	
40	Six bunches of Pompon Chrysanthemums, three spikes as cut to form a bunch	5s.	3s.	2s.	

Classes 36 to 40 open to Cottagers only, residing in the Kingston Poor Law Union, without Entrance Fee.

Specimen Chrysanthemums to be in pots not exceeding 12 inches in diameter and to show one inch of clear stem above the soil.

The Chrysanthemum.

SPECIAL PRIZES.

Class 21, for Twelve bunches of Pompons, distinct; three stems as cut to form a bunch. First Prize—A Timepiece, value 21s., presented by a gentleman.

Class 42, for Six Chrysanthemums in pots, large flowering varieties, distinct, having the largest number of good flowers. First Prize, 31s.; Second, 21s.; Third, 11s.; presented by a gentleman.

Class 43 (*open to Ladies only*), for the most tastefully arranged Single Stand of cut flowers and foliage, suitable for table decoration. Prizes—Ornamental Articles value 27s., and 15s.; presented by a lady.

Class 44, The Champion Challenge Vase, value 25 gs. (the gift of the PRESIDENT and VICE-PRESIDENTS in 1879), for 48 Chrysanthemum Blooms, distinct, 24 to be Incurved and 24 to be Japanese, arranged on separate boards.

THE VASE AND £3 IN MONEY FOR 1st PRIZE.

SECOND PRIZE, £2.

THIRD PRIZE, £1.

WINNERS OF THE VASE.

1879. T. GALPIN, Esq., Putney Heath. Gardener—G. Harding.

1880. CHAS MACIVER, Esq., Liverpool. Gardener—W. Tunnington.

CONDITIONS.—The winner to hold the Vase till the next Exhibition, when it shall be returned to the Society. Should the same exhibitor win the Vase *twice* (not necessarily consecutive), it shall become his property; but should it be won by three different exhibitors in the first three years, then the competition in the fourth year shall be confined to the three winners.

Class 45 (*Cottagers only*), for the best Arrangement of Chrysanthemums and foliage, *Grown out of doors, to be shown in a soup plate.*

First Prize, A BOUND BOOK, VALUE 10s. 6d.

Second Prize, A DITTO, VALUE 5s.

KINGSTON & SURBITON CHRYSANTHEMUM SOCIETY.

Form to be filled up and returned to the Hon. Sec. not later than
November 12th.

It is my intention to exhibit in the undermentioned classes at your show on
November 17th and 18th, 1881.

Signature _____

Address _____

State here the class in which you intend to exhibit.	Describe here the objects you intend to exhibit.	State here the space required in sq. feet.	Column to be filled up by Secretary.	

CHAPTER XIX.

CALENDAR FOR MONTHLY OPERATIONS.

JANUARY.—Prepare compost of sound red turfy loam, well rotted manure, and sand. Where good suckers or short, stout basal shoots can be obtained, with a few rootlets attached, pot them off singly, picking out all eyes below the soil.

The following directions are, by Mr. Douglas, quoted from the *Gardeners' Chronicle*: "Still continue to take off cuttings if the required numbers were not put in last month. Some varieties are shy in producing suckers, and it is necessary to wait until March sometimes before they are ready. Slugs are troublesome, and eat over a considerable number, but we must search for them at night with a good lamp. Place the pots containing the cuttings over a gentle hotbed. As soon as they have rooted the young plants may be removed to a frame or cool greenhouse, where air can be admitted more freely than it can be in a frame where cuttings have not formed roots. Some cuttings are so stubborn that it may be necessary to renew the heat for them." Root suckers make the best cuttings. Stem cuttings rush into bud and flower early, and rarely yield good flowers. One good cutting in the centre of a $2\frac{1}{2}$ -inch pot is a good way of rooting them.

"The bloom has been rather late this year, but now even the latest varieties are in flower, and the main collection is still in good order. Mildew is a very troublesome parasite; it would, perhaps, be difficult to get a large collection into the blooming state without it. Continue to dust the leaves with flowers of sulphur, and keep it off as much as possible. The only work that can be done now is to attend to the plants with water, and to remove decaying flowers before they injure the others. Some time during this month the cuttings must be put in. I prefer to put one in a small 3-inch pot, using light sandy loam. If very large specimen Pompons are desired, it is quite necessary to put in the cuttings very early in December. The best way to get large specimens of the large-flowered section is to select old plants that have been grown to produce exhibition blooms. Those that have formed from three to six growths 2 inches or 3 inches up the stem are the best. The plants should be taken up, and have nearly all the soil shaken from the roots, and be potted in 6-inch or 7-inch pots. Place them in cold frames, or on a shelf in the greenhouse. Pompons seldom do well treated in that way, but it is best to propagate them from cuttings. Some varieties, including Mrs. Rundle and its forms of the large-flowered section, can be grown into good specimen plants from cuttings put in early." Late sorts will remain in flower until near the end of next month. Give ample ventilation and a little fire-heat in wet or cold weather. Cut over the old flower-stems of plants which have ceased blooming, and store the plants in cold frames, plunging the pots as a security from frost.

FEBRUARY.—Chrysanthemum seeds may now be sown in pots, pans, or boxes on a slight bottom heat, taking care that, so soon as the young

seedlings appear, that they are placed quite close up to the light. Still continue propagation by suckers or cuttings, which will quickly emit roots on a genial hotbed; give air on fine days to prevent damping. Cuttings or suckers already rooted may be potted off and stored in a cold pit or frame; protect with mats in frosty weather; give air freely if mild. If green fly appears dust with snuff or tobacco powder. A solution of tobacco and soft-soap in warm (80°) water will kill green fly. Plants still in flower should have a little fire heat and ample ventilation. Prepare compost, pots, &c., for forwarding on cuttings next month.

MARCH.—Pot on all early rooted cuttings as they require it. Many fail through allowing the cuttings to become root-bound in the small cutting pots. This is fatal to good blooms. Keep the frames close for a couple of days after potting, and shade if the sun is powerful, after which give air whenever possible. Cuttings may still be inserted in heat. Early sown seedlings may now be selected from the seed pans, each being carefully potted off into a 2½-inch pot in a light compost of leaf-mould, loam, and sand. Place near the light, but shade from hot sunshine, and keep close for a day or two until they establish themselves. Small seedlings may be pricked out in rows in pans or boxes. Seeds may still be sown as before directed. Towards the end of the month the cuttings potted some two weeks ago may be stopped.

APRIL.—Cuttings may still be inserted for late blooming and for ordinary decorative uses. Cuttings potted off last month should have air on all favourable occasions. Syringe morning and evening, and leave air on the frames all night in fine weather. Attend to stopping or pinching and training of "specimen" plants as occasion demands. Harden off plants ready for placing outside next month. Syringing once a week with clear soot water will prevent appearance of green fly and add colour to the leaves. Pot on all strong early rooted cuttings as they require it, and also early seedlings, so as to get them strong and hardy for placing outside next month. Pricked out or potted seedlings may now be brought into cold frames or pits. Remove decayed leaves, stop as may be essential about once every fourteen days, but never immediately before or after repotting. Prepare beds and borders and positions out of doors where pot plants are to be placed.

MAY.—Little or no artificial protection will now be essential for the Chrysanthemum until the plants are sheltered or finally housed in the middle of October. Cuttings rooted now in a cold frame make nice dwarf specimens for small pots in greenhouse or window for November flowering. Place all plants out-of-doors in mild weather. Stop, thin out the shoots, leaving only one to three on a plant where large blooms are desired. Train specimens, secure or stake the tallest growths to prevent wind breakages. Watering and syringing must now be performed with punctual regularity. Pot on such plants as require it. Prick off or pot later seedlings. Make open-air plantations and plant the strongest seedlings out at the foot of walls or fences where they are to remain for blooming. Seedlings should be allowed to grow away with one shoot only, and may be planted 9 inches or 12 inches apart. Prepare compost heaps for final shift, and prepare 8-inch and 12-inch pots, crocks or

oyster shells for drainage, manure water in tubs or tanks, &c. Provide stakes and trellises for tall plants. Insects, such as green fly, caterpillars, earwigs, "cuckoo spit," etc., will now begin their ravages. Syringe with clear soot water as a preventive. Dust with snuff or tobacco powder, or syringe with tobacco water and soft soap mixture. Earwigs will soon appear and may be entrapped in hollow stalks or in little rolls of brown paper, into which they like to creep for shelter.

JUNE.—As the pots become filled with roots liberal supplies of water will be requisite. Syringe morning and evening, and keep insect pests at bay as already recommended. All stopping should now be performed for the last time. If aphid is an annoyance, dust the tips of the growths with tobacco powder, snuff, or immerse them in a decoction of soft soap and tobacco. Tie down shoots of plants intended for trained specimens. The most vigorous and forward plants may now be potted for the last time into 8-inch or 10-inch pots. One plant in each pot will give far finer flowers than where root-crowding is induced by placing two or three plants in a pot. Place the plants out in a sunny, airy position and water freely. If the pots are plunged in coal ashes to economise labour in watering, turn them frequently so as to prevent the plants rooting through the bottoms of the pots.

JULY.—Watering will now become the chief factor in Chrysanthemum culture. As the pots become filled, weak manure and soot water must be given every alternate watering. See that tall-growing shoots for production of large blooms are properly supported, or a gust of wind may destroy one's hopes for a season. Where there are three main shoots to each plant they should be secured together by a triangular bast tie; mutual support and protection is thus obtained. See that the earth is pressed down firmly around the edges of the pots in dry, hot weather. The July bud will now appear at the points of the strongest and earliest shoots, and must be at once carefully removed. Two or three shoots will appear from below, and the terminal buds of these shoots produce fine shapely flowers. If green fly appears, dip the tips of the shoots in a solution of soft soap and tobacco, an effectual remedy.

AUGUST.—A mulching of well rotted sheep manure may be given to the tops of the pots during hot weather, and more liberal supplies of liquid manure will also be needful. Never forget that the Chrysanthemum is of all other plants a gourmand. Syringe frequently, watch for green fly. Earwigs and caterpillars will also now be plentiful. Destroy as before advised. Growth will now be in full swing. Cleanliness and watering are the main items of culture. About the end of August, or beginning of September, the flower buds begin to show at the ends of the strong young shoots. Beneath each terminal bloom bud will be noticed three or four prominent growths breaking from the axils of the leaves immediately beneath the flower bud. These axillary or side shoots, if allowed to remain, would draw considerable nutriment away from the flower buds; hence they must be removed while in the bud stage by picking them carefully away with the point of a knife. After removal of these the bloom buds swell rapidly, and must be assisted by liberal and repeated applications of liquid manure.

SEPTEMBER.—Syringe and water freely; disbudding will also still

require attention. Specimen plants will also require tying out with a view to their future effect. High winds must be provided against by careful tying to stakes or wire trellises. Liquid manure of a substantial kind will now be required. First water with clean water, then give a strong dose of manure water, thus enabling it to permeate the entire body of soil in the pot. "Disbudding" and "setting" the buds as directed last month will still be necessary, as the plants vary in forwardness. Specimen plants now require great and continual care in watering and staking. Mildew must be banished by dusting with sulphur. Specimen plants may now be staked, regulating each shoot in its final position. Disbudding as already directed in case of large-flowered kinds.

OCTOBER.—Tying specimen plants and watering are the main operations. Disbudding must also now be continued and insect pests watched carefully, or they will mar the symmetry of some of the finest buds. Secure weakly shoots from rude winds. Feed the plants liberally until the colour shows in the buds. Neglect in timely watering and mildew are a fertile cause of annoyance now among specimen plants. Early flowering kinds must be taken under shelter before the end of this month. Wet and frost are alike fatal to blooms showing colour. Prepare for housing general collection.

NOVEMBER.—Water as before. Withhold liquid manure as the flowers expand. Carefully remove the plants indoors early this month if not already done. Frosts of some severity may now be expected. Give ample room to each plant, and admit air freely. If mildew appears, apply sulphur dusted from a coarse canvas bag. A little fire heat should be applied on cold or wet nights. Early kinds will now be in full beauty. The great fog month is made genial and sunny by the smiles of our "winter queen." Remove all suckers as they appear, retaining rare kinds for next season's growth.

DECEMBER.—At the latter end of last and beginning of present month Chrysanthemum-tide is at its height, and the careful grower is rewarded for his year's labour, that is if he has made it a labour of love. Fire heat should be applied during cold, wet weather, and air freely admitted on all fine days. Any suckers which appear now on good or rare kinds should be removed and potted. Many kinds and some of the finest do not sucker well or even afford good cuttings in the spring. Mind that the plants do not suffer for want of water. Give late blooming kinds a little weak liquid manure and the lightest position possible. Remove dead flowers and leaves as they occur.

GENERAL A B C LIST OF CHRYSANTHEMUMS.

A general list of the now many varieties of Chrysanthemum has long been a desideratum in garden literature. The late Mr. Salter's work on "The Chrysanthemum" brought the subject up to 1865, and his book is even yet, and must ever be, considered a most noteworthy addition to our written knowledge of this favourite flower. So many new kinds have of late years been added from France and the Channel Islands, that a new list has become a thing greatly to be wished for, indeed absolutely necessary. Although great pains have been taken to make the following catalogue as complete as possible, there are, doubtless, sundry little slips and some few omissions; and regarding these the author trusts that his friends will point them out to him, so that emendations may be made from time to time. Wherever possible, names of the actual raisers have been added, such as Davis, Smith, Bonamy, Pele, Delaux, etc.; in other cases the names are those of the nurserymen who have distributed French and Channel Islands seedlings, such as Salter, Veitch, Bull, Dixon, Cannell, etc., etc.

ABBREVIATIONS.

- In. Incurved varieties.
- R. Reflexed or Recurved kinds.
- A. Large-flowered Anemone kinds.
- P. Pompon varieties.
- P.a. Pompon Anemone kinds.
- J. Japanese varieties.
- L. Large-flowered kinds.
- P.e. Early or Summer flowering Pompon varieties.
- P.s. Single-flowered Pompons.
- C.s. Single-flowered Chinese.
- J.s. Single-flowered Japanese.

- | | |
|---|--|
| P. Abbé Dantin (<i>Delaux</i>).—Violet amaranth tipped with gold | P. Adonis (<i>Bouch</i>).—Rose and white |
| J. Abbé Lageze.—Delicate rose, white centre | P.e. Adraestes.—(See Adrastus) |
| In. Abbé Passaglia (<i>Smith</i>).—Broad florets of a brassy amber tint | P.e. Adrastus.—Mauve-purple, fine for open border (September and October), or for early bloom in pots; sure and good |
| P.a. Abel.—Cinnamon and yellow | P.a. Agatha.—Flowers very full and double, of a bluish pink colour, tipped with gold; a pretty dwarf variety |
| P. Acis (<i>Salter</i>).—Pale straw yellow | P. Age d'Or.—Yellow, hybrid |
| A.l. Acquisition.—Bright rose-lilac and yellow disc; guard florets broad and regular; centre very high and round; a splendid flower | A.s. Aglala.—Blush, white centre |
| P.f. Adèle Presette.—Fringed lilac | J. Agréments de la Nature.—Flower large, numerous well-finished petals twisted like a corkscrew, outer ones recurving, those in the centre raised, colour golden yellow, completely shaded and flamed reddish-brown, one of the prettiest varieties. (1st class, Hackney, 1882, Dixon) |
| P. Admiral Durmont Durville.—Brassy nankeen, fine | |
| L. Admiranda (<i>Delaux</i>).—Pink, centre carmine | |
| In. Admiration.—Light carmine and orange | |
| P. Admiration (<i>Schwartz</i>).—Perfect button-like flowers of a soft lilac colour | |

- P. Aigle d'Or.—Bright canary yellow, hybrid Pompon. (Syns., Heben Bridge and Berrol)
- In. Aimée Ferrière.—Silver white, beautifully tipped rose-pink. (See Jeanne d'Arc)
- J. Aimée Maurel.—Rose, good and showy
- In. Alarm (Clark).—Violet-crimson, finely incurved, good show flower
- In. Alba formosa.—Good for specimens, dwarf white
- P. Alba multiflora (Salter).—(See Album multiflorum)
- P. Alba perfecta (Bouch)
- J. Alba plena (Délauz)
- J. Alba striata.—Good and showy
- J. Albert (1882).—Reddish crimson flushed with bright red
- In. Albert Helyer (Davis).—Large rose-purple, fine flower
- R. Albin (Godereau).—Crimson-violet, very fine
- P. Albion (Boucharlet).—White, dwarf and good habit
- P. Album multiflorum (Salter).—White, slightly yellowish, dwarf, and good for specimens
- J. Alexander Dufour (1882).—Bright violet, reflex dark violet, rich in tint and very distinct
- P. Alexander Pelé.—Salmon-bronze, or reddish, tipped with gold
- R. Alfonso (Bull).—Distinct, maroon or bright brown, tipped with gold
- In. Alfred Salter (Smith).—Delicate pink, large and finely incurved, grand show flower. (See coloured figure in Salter's "Chrysanthemum")
- P. Alliette (Lebois).—Magenta purple
- J. Alexandre Dufour.—Violet, shaded dark violet-purple, dwarf, free and early
- In. Alix (syn., Voltaire).—Rosy carmine, good flower
- R. Alma (Clark).—Rose-crimson, very fine
- P. Alphonse Bois Duval.—Orange-buff
- S f. Alphonso (Bull).—Crimson-brown, yellow tips
- J. Alphonse XII. (Délauz).—Large flower, brick red, shaded with salmon; novel shade of colour
- P. Amalthée
- P. Amarantine (Bouch).—Lilac purple
- J. Amarantina carminata.—Bright amaranth tipped with white; a fine flower
- In. Ambrosia (Clark).—Rosy nankeen
- R. Amphilla (see Amphilia)
- R. Amphilia (Bull).—A most useful and effective variety, flowers of a bright glowing red colour
- P. Amy.—Clear yellow, dwarf habit, fine form and free
- P. Amy (Salter)
- P.e. Anastasio (Veitch, 1882).—Subglobose, pink, shaded magenta, fragrant and pretty
- In. Anaxo.—Red-orange, large flower
- P.e. Andromeda (Durham)
- P. Andromeda (Smith).—Cream with brown points
- L.r. Angel (Lacroix).—Florets creamy white, lilac behind, good habit
- J. Angéle (Ware, 1884).—Rosy wine colour with silvery reflex
- In. Angelina (a bronzy sport from Lady Slade).—Golden-amber, shaded with cinnamon, splendid exhibition flower, has been awarded two first-class certificates in 1882
- In. Anna de Belocca.—Flowers beautifully imbricated, of a sulphur white colour, very pretty
- P. Annette.—Silvery lilac tipped with purple, creamy white towards the centre of the flower, full, and of good form
- P. Annie Forsyth.—Good, dwarf, and free, for edgings
- P. Annie Henderson.—Pale yellow
- P. Annie Mitchell.—Early, bronze carmine or reddish purple
- R. Annie Salter (Smith).—"Salter's Annie" delighted exhibitors in 1850, and is yet one of the best of reflexed flowers, of good habit and free, yellow
- In. Antigone.—Fine incurved, white
- P.a. Antoinette Adam (Bonamy).—Anemone, disc yellow and white, ray snowy white
- In. Antonelli (Smith).—Salmon bronze, suffused with orange
- P.a. Antoninus.—Small Anemone, yellow, with orange centre
- M. Anthemis (Downton).—Rosy lilac. (See also Themis)
- P. Apollo (Smith).—Chestnut and yellow Pompon
- J. Apollo.—Good showy Japanese
- P. Apothéose.—Full flower, carmine-purple
- P. Arabella.—Blush (hybrid P.)
- P. Arbre de Noël (Christmas Tree).—Full flowers, bright orange, shaded red, beautifully imbricated

- P. Arc en Ciel (Rainbow)
P. Argentine.—Silvery white, very fine, free flowering in wreath-like masses; one of the best for pot culture
R. Ariadne (*Clarke*).—Creamsuffused and tipped with rose
P.a. Ariane (*Bonamy*).—Amaranth and gold centre
In. Ariel (*Smith*).—Lilac blush
In. Arigena.—Amaranth, good late variety. (See Inner Temple and Refulgence)
P.f. Ariosto (*Bull*).—A fine flower of an attractive amaranth-crimson colour, slightly shaded with yellow; very dwarf and prettily fringed
In. Aristée.—Delicate lilac, with light centre; fine incurved flower for show
J. Arlequin (*Délaux*). — Nankeen yellow florets more or less marked and shaded crimson
In. Arlequin (*Lemoine*). — Salmon coloured florets. (See also Harlequin)
In. Artemis (*Downton*).—Rose-lilac
In. Arthur Wortley (*Smith*).—Rosy amber with gold tips
L. Ascania (*Lebois*).—Golden yellow, large and double
J. Asmodée (*Délaux*). — Petals frilled, rosy yellow, tips yellow, reverse nankeen, flamed with violet-rose
P. Asmodée
In. Aspasie (*Smith*).—Rose-purple
P.l. Aspasie.—Flowers large and very double, white, slightly spotted with yellow; petals very large
P. Astala
P.a. Astarte.—Brassy amber
P.a. Astrea (*Smith*).—Lilac blush and gold centre
A. Astre du Matin (Morning Star).—Lilac-peach
In. Astrolabe.—Orange-nankeen
A.l. Atargulle.—White, centre yellow, large and fine
P.a. Atropos.—Beddish crimson
P. Atropus. (See Atropos)
R. Atro-rubens.—Dark red-carmine
P. Attila (*Lebois*).—Orange-rose
In. Attraction (*Smith*).—Large blush, margined rose-pink
P. Augusta (*Smith*).—Blush-white, early
In. Auguste Mie.—Red, tipped gold, fine
J. Aurantium (*Salter*). — Golden yellow
In. Aureum multiflorum (*Smith*).—Bright pure yellow, of medium size and early
P.e. Auréole (*Boucharlet*).—Lilac-rose, dark chamois in centre, good, free, and early
P. Aurore Boreale (*Bonamy*).—Yellow-buff
P. Aurore Boreale (*Pethers*).—Dark orange
Aurore (*Huber*). — Yellow-buff, back of petals lilac
P. Aurore (*Lemoine*). — Very fine, bright orange-coloured flowers of perfect form
L. Aurore Toulousaine (*Délaux*).—Dark purple
P. Autumna.—Buff
In. Bacchus (*Salter*).—Rosy fawn
J. Balmoreau (*Délaux*). — Large flowers, clear amaranth, shaded with violet, tipped with gold
In. Baraba.—A sport of Barbara, having the outer petals bronze coloured
In. Barbara.—Golden yellow, fine show flower
In. Baron Beust (*Salter*).—Red-chestnut, tipped with gold
J. Baron de Prailly (*Prailly*).—Lilac and white, large
Baron d'Ulimbert (*Lebois*).—Purple, shaded with violet
L. Baron de Scalebert (*Bonamy*).—Rosy lilac, white tips, very double and large
In. Baron Seabert.—Light straw
P. Barra (*Bull*).—Chamois, shaded with purple, a beautiful flower with good broad florets, very fine
In. Bartard.—Orange
P. Bayardier
J. Beaumont (*Major Carey*).—Pink florets
In. Beauregard (*Clark*).—Dark maroon
J. Beau Sejour. — Violet-carmine, tipped white, very showy
R. Beauté du Nord (not to be confounded with Triomphe du Nord). — See Bixio
J. Beauté Parfait.—Light rose
P. Beauté Toulousaine. — Rosy purple and white, very double
R. Beauty of the North.—Dwarf and early, maroon-crimson. (See Bixio)
In. Beauty.—Lilac-blush, one of the best of the light rosy lilac vars.
L. Beauty of St. John's Wood (*Henderson*).—Creamy white

- In. Beauty of Stoke (*Salter*).—Dark orange, with chamois backs to the florets
- J. Beauté de Toulouse (1882).—Pure shining pale rose, large and double
- Ia Beethoven (*Rundle*).—Red, with purple reflex, tipped with yellow-bronze. (See St. Patrick, Refulgence, and Inner Temple)
- Bella Donna (*Smith*).—Delicate lilac with light centre, incurved
- J. Belle Castillane (*Délaux*).—Mauve-lilac, pointed with deep buff, very fine flower
- J. Belle Gabrielle.—Medium sized flower, very double, of a rich rose-violet, changing to dark purple, reverse of the petals pointed with pure silvery white
- J. Belle of Japan (*Major Carey*)
- J. Belle Rose (*Délaux*).—Dwarf, peach-rose, centre light chamois
- In. Bendigo (*Ridout*, 1883).—Golden sport from Mrs. Heale
- J. Bend Or (*Veitch*, 1882).—Bright sulphur-yellow, large and good
- P. Bernard de Rennes.—Yellowish buff
- R. Bernard Palissy (*Smith*).—Bright fiery orange, very distinct
- P. Berrol.—Golden yellow, makes a good specimen. (Syns., Aigle d'Or and Hebden Bridge)
- P. Barthille
- In. Bertier-Rendatler (*Délaux*).—Light yellow, flamed and tipped with brownish red, good showy flower
- In. Beverley (*Smith*).—Large ivory white broad petals, fine massive bloom
- In. Beverley, Golden.—(See Golden Beverley)
- In. Beverley, White.—(See Beverley)
- A.l. Bijou.—Bright rosy purple, guard florets broad and stiff, disc high and finely formed
- P. Bijou.—Clear rose-lilac, a good late bloomer. (See also Mon Bijou)
- J. Bijou de Guernsey (*Major Carey*).—Good and showy
- P. Bijou d'Horticulture.—White tinged with sulphur, brown centre on first expansion, good habit
- J. Bismarck.—Bright orange or cinnamon, shaded with amber
- R. Bixio.—Violet-carmine, fine colour. (See Beauté du Nord)
- In. Blanche de Castile (*Délaux*).—Carnation, shaded dark orange. (See also Blanche of Castile)
- J. Blanche Fleur.—Beautifully frized petals of great length, colour a delicate blush passing to snow-white, a charming large flower, keeps a long time in a cut state
- In. Blanche of Castile (*Smith*).—Pure white. (See also Blanche de Castile)
- In. Blonde Beauty.—White, tipped pale rose, fine for cutting and late bloom
- In. Blush Queen.—Very large
- In. Boadicea (*Clark*).—Rose and cream, large bloom
- P. Bob (*Smith*).—Dark crimson brown, dwarf and good colour, one of the best of its class, and inferior only to Julia Lagravère
- P. Bolide.—A very full and regularly formed imbricated flower of a golden yellow colour
- P.e. Bolide (*Lemoine*)
- In. Bolivar (*Lemoine*).—Flowers double and well imbricated, colour ochrous yellow, changing to lilac
- P.e. Bordeaux (*Pelé*).—Sulphur white
- In. Bossuet.—Rosy carmine, free and fine
- P.a. Boule de Neige.—Anemone flowered, snowy white, very fine
- P. Boule de Neige (*Boucharlet*).—(See La Neige, Bouch.)
- J. Boule d'Argent (1883).—Deep orange-red, reverse gold
- J. Boule d'Or (*Boulanger*).—Golden yellow with a red tint
- P. Boule Rose.—Rosy lilac
- In. Bouquet de Fleurs (*Clark*).—Large dark red
- P. Bouquet de la Reine.—White tipped with rose, very free and dwarf
- J. Bouquet Fait (*Délaux*).—Immense flowers with twisted florets; colour rich rose and silvery white, with golden centre, very fine
- J. Bouquet Nationale.—Rosy white
- P. Bouquet Parfait.—Clustered blossoms, dwarf and free habit
- P. Bouton d'Argent (*Lemoine*).—Flowers small, very double, and beautifully imbricated, of a flesh white, the outer turned back, giving it the appearance of a double white Ranunculus

- J. Bras Rouge (*Délaux*).—Full dark fiery red, centre golden yellow
- P. Brazen Mirror (*Pethers*).—Brassy yellow, Liliputian
- P. Brilliant.—Crimson-scarlet, good habit, smaller than Bob
- In. Bronze John Salter
- J. Bronze (*Cannell*).—Bronze, margined with yellow, perfect in form. Also known as Cannell's Bronze
- J. Bronze Dragon.—A large flower of a bronzy salmon or copper colour (scented)
- I. Bronze Jardin des Plantes.—Like the type, except in colour, sport
- P. Brown Cedo Nulli.—Dwarf and free
- P. Brown Cluster.—Dwarf and free flowering
- P.a. Brunette.—Liliputian Anemone, orange-buff
- P. Brunette (1883).—Good late Pompon, amber shaded cinnamon
- P. Cadics Perfection.—Bright red
- P. Calibri
- P.a. Calliope (*Smith*).—Bright ruby red, with full high centre, very fine
- In. Campiastroni (*Smith*).—Deep rose
- P. Canary Bird (*Smith*).—Clear yellow
- In. Canary Yellow Cherub. (A pure canary or primrose).—Yellow sport from Cherub, well built and shapely exhibition flower
- In. Cannell's Bronze. — Good amber bronze
- In. Cannell's Bronze. — (See Bronze Cannell)
- In. Canute. — Large red, with gold points
- P. Capella (*Salter*).—Dark red chestnut, with orange centre
- P.e. Capitaine Nemo (*Lemoine*). — Purplish rose, slightly incurved, early flowering
- A.l. Captain Montels.—Salmon-buff
- A.l. Captain Thoubais (*Bonamy*). — Disc cinnamon and yellow, ray a light red, very large and fine
- Captain Webb (*Ware*, 1884).—Clear pink
- In. Captivation (*Salter*). — Cream, shaded rose, fine flower
- In. Caractacus (*Clark*). — Rose-carmine
- In. Cardinal, golden amber, finely incurved; fine for exhibition as cut bloom
- In. Cardinal Wiseman (*Smith*). — Bright red-crimson; dwarf compact habit
- In. Carissima (*Smith*).—Ivory white, pencilled rose
- P. Carminatum.—Indian red, tipped yellow
- P. Caroline
- J. Carpet (*Délaux*).—Deep carmine, bordered white
- In. Cassandra (*Smith*).—Ivory white with rosy tips
- In. Cassy (*Smith*).—Orange and rose, fine large flowers
- P.e. Cassy
- J.e. C. des Grange (*Bouch*).—White, with yellowish centre, early and free blooming, dwarf habit
- P. Cedo Nulli.—Good white; one of the best in all ways for specimens for show or decoration, very free
- In. Celestial.—White, fine
- P. Cendrillon.—A full double flower of a rosy lilac colour; reverse of the florets white; a dwarf-growing, early-flowering variety
- J. Ceres (1st class R.H.S. 1882).—Broad ribbon-like florets, white, with primrose centre. Intermediate between Fair Maid of Guernsey and Meg Merrilies; it is a good late variety. (*Jackson and Son*)
- In. C. E. Waters.—Red and orange, fine show flower
- P. Champs Elysées.—An attractive flower of a rich violet-amaranth colour
- J. Chang.—Giant flowers when well grown, bronzy red shaded cinnamon
- P.e. Charlemagne.—Red, early flowering
- P. Charles Dickens (*Lemoine*). — Flowers large; colour a very deep chrome yellow; the petals of this pretty variety are beautifully tipped with purple
- J. Charles Hubert. — Red, yellow tipped, back bronze
- J. Chaté, M. — Of a quilled Aster form, peach colour, centre white
- P. Chedeville.—Reddish crimson and orange
- In. Cherub (*Smith*).—Golden amber with rosy tint
- R. Chevalier Domage.—Golden narrow florets, bright and good
- L. Chieftain.—Red, tipped gold

- J. Chinaman (*Dixon*, 1882).—Bright violet-purple, centre silvery white; extra fine. Early bloomer if well grown. Messrs. Dixon exhibited it on Oct. 10, 1882
- P. Christianum (*Portuzés*). — Dark violet-rose
- P. Christiana (*Smith*).—Canary yellow, with brown points
- R. Christine.—Rosy blush, fine large flower. (Syn., Ne Plus Ultra and Peach Christine)
- R. Christine, White.—White sport of the last
- R. Christine, Golden. — Yellow or amber
- In. Christmas Number (*Cannell*, 1882). Pure white, good late variety
- In. Christophe Colomb. — Reddish violet
- L. Christobel. — Bronze-rose, fawn centre
- J. Chromatella (*Salter*). — Orange and brown
- P.e. Chromatella — Golden yellow, shaded orange. In some lists it is called Chrome Stella
- In. Chrysipe.—Rose-purple and silver edge
- P. Cinderella (*Salter*).—White Lili-putian
- P. Circe
- J. Cité des Fleurs (*Délaux*).—Florets revolute orange-scarlet or velvety crimson-amaranth; white behind; frizzed florets
- P. Citronella (*Smith*) — Pure clear yellow
- P. Clarissa.—Cinnamon, very full and fine
- P. Clementine.—A first-rate hybrid variety, producing medium-sized flowers of a rich lemon-yellow colour
- P. Cleobis.—Rose, carmine, and white
- P. Cleophas (*Lebois*).—Yellow, centre orange
- In. Cleopatra (*Smith*).—Blush, with rosy shade
- A.l. Cleopatra.—Reddish buff
- P. Cleovia.—Rose, carmine, and white Clifton.—Yellow
- In. Clipper (*Clark*).—Carmine and gold
- R. Cloth of Gold (*Smith*).—Gold, large flower, good when well grown
- P. Clovis.—Rose, shading to white
- J. Clytie (*Délaux*).—Of large size and broad petals, rosy salmon, with incurved golden centre petals, forming a contrast similar to the Cocardean Asters
- J. Cœur fidèle (*Délaux*)
- L. Columbine.—White, shaded rose, fine formed flower
- J. Comédie.—Large full flowers of a clear bright rose colour
- R. Comet (*Clark*).—Orange and red, large
- J. Comet (*Veitch*, 1882).—Crimson and gold
- P. Comète Biela (*Délaux*).—Finely imbricated, brick red, shaded orange, and tipped with yellow
- J. Commandant Baco (*Veitch*)
- In. Compactum.—Peach
- J. Comte de Germiny (*Veitch*, 1882). —Bright nankeen-yellow, occasionally striped crimson, good
- L. Comte de Morny.—Light violet, fine and free
- P. Comte Achille Vigier.—Pale salmon mottled
- J. Comtesse de Beauregard.—Light rose, or bronze-yellow behind; a beautiful flower
- In. Comtesse de Granville
- In. Comtesse de Derby. Also known as Countess Derby
- P. Comtesse de la Chartres
- In. Conrad
- J. Constance.—Brilliant deep crimson, with golden tips upon the centre petals
- J. Constance (*Délaux*).—Deep crimson or fiery red, tipped with gold
- P. Cooling's White.—(See Snowdrop)
- P.e. Coquillage.—Rosy bronze
- J. Cornet (*A. Salter*, 1882).—Crimson and gold
- P. Cosbi (*Lebois*).—Dark carmine
- J. Cossack (*Veitch*).—Reddish crimson and yellow
- In. Count Cavour (*Clark*).—Rosy carmine
- J. Countess de Beauregard.—Light rose, splendid flower
- In. Countess of Derby.—Rose shaded
- L. Countess of Granville.—Fine white.
- L. Countess of Warwick.—Yellow
- P. Creole
- P. Crimson Perfection.—A most desirable and effective variety, with beautiful bright crimson flowers, one of the richest and best colours in the Pompon section
- R. Crimson King (*Dixon*, 1st class R. H. S., 1882).—Full, compact flower, of a rich bright chestnut-crimson colour, good. (See King of the Crimson)

- R. Crimson Velvet (*Salter*).—Beautiful velvet crimson, very rich, requires careful culture
- J. Criterion.—Buff-yellow, a fine flower of good form, dwarf and free
- In. Crossus (*Smith*).—Dark orange-carmine, fine large spherical bloom
- J. Cromatella.—Long florets, yellow
- P.e. Cromatella (*Pelé*).—Yellow or orange, tipped with brown, very early
- J. Crousse, M. (*Délauné*).—Indian red, yellow reflex; early, free, and very distinct and curious
- P. Croustignac
- J. Cry Kang.—Rose-magenta, very free
- P.e. Curiosité (*Bouché*).—Lilac and white
- L. Curiosity (Temple Gardens, 1882).—Lemon-yellow tipped with brown; very fine and distinct
- P.a. Cybele.—Anemone, rose-amaranth and gold centre; very distinct
- In. Cyclops (*Smith*).—Large orange-salmon
- J. Daimio.—Pink, changing to lilac; erect ribbon-like florets
- J. Da-Jakko.—Large red with contorted florets
- P. Dame Blanch.—White and free. (White Lady of some)
- P. Danæ (*Smith*).—Bright gold, dwarf, free bloomer; good for specimens
- In. Daphne (*Smith*).—Sulphur
- P.a. Daphnis.—Carmine
- J. Day-Gakko (*Délauné*).—See Da-Jakko
- In. Defiance.—White, fine
- J. Delicatum (*Voitch*, 1882).—Soft lilac tinged with white; good light variety
- J. Delicés d'Automne.—A mass of thread-like petals, frizzed, curled and laciniated, of an amaranth-purple colour; intermixed with these are a multitude of finer petals of a snow-white colour
- Delight.—See *Lutea formosa*
- P.e. Delphine Caboche (*Pelé*).—Violet-rose
- In. Demosthenes.—Red-orange
- P. Desaix (*Lemoine*).—Golden yellow
- L. Desdemona.—Fawn and salmon; very double
- J.e. Desgrange, Madame C.—Early flowering Japanese hybrid; good for pots or open-air culture. (*Ware*, 1882)
- L. Deucalion.—Large rose pink, early
- P. Diabolique (*Fortués*).—Carmine-rose, frilled petals
- In. Diadem.—Syn., Lucidum, early white
- A.l. Diamant de Versailles (*Smith*).—Pure white with rosy centre
- J. Diamond (*Major Carey*).—Brown and orange tinted, large
- P. Diana (*Salter*).—Pure white
- P.a. Dick Turpin.—Magenta, medium size
- J. Dictator.—Red, highly perfumed and good
- In. Dido (*Smith*).—Sulphur-white, with stiff florets
- P. Diogène.—A beautifully imbricated flower of a showy amaranth colour
- P. Diogenes.—See Diogène
- P. Distinction.—Blush
- In. Dobrei (*Clark*).—Rose-lilac
- J. Dolores.—Petals very large, same form and same size of flower as *Erecta superba*, but entirely distinct in colour, which is a rich violet
- P. Doña Alva Gonzales.—Gold
- P.f. Doña Carmen (*Lebois*).—White, fimbriated petals
- In. Donald Beaton (*Smith*).—Dark orange-red
- P. Don Alva Gonzales (*Bonamy*).—Yellow, clouded with bright carmine and crimson, fine
- P.e. Donna Carmen.—Pure quilled white
- L. Don Quixote.—Large mottled rosy lilac
- In. Draco (*Smith*).—Dark red
- L. Dragon (*Clark*).—Puce, with light centre
- J. Dragon, Red.—See Red Dragon
- J. Dragon's Tooth.—Rose-purple
- J. Dr. Audiguier (*Délauné*).—Rich amaranth-crimson, marbled white; reverse of the spiral florets silvery white
- P.e. Dr. Bois Duval.—Carmine-red. (Syn., Scarlet Gem and Little Bob)
- In. Dr. Brock (*Smith*).—Reddish orange
- P. Dr. Clos (*Lebois*).—Fine lilac-rose
- P. Drin Drin.—Clear bright yellow, good for cutting
- P. Drine Drine.—(See Drin Drin)
- L. Dr. Lindley.—Dark orange
- J. Dr. Macary.—Pale, broad petalled rose, shading into white
- L. Dr. Maclean.—Mottled rose, fine

- J. Dr. Masters (*Salter*).—A very distinct and showy variety, with long sword-like florets, opening with a large centre of bright yellow, the exterior being formed of showy red florets, and the centre changing to red as the flower-heads expand, the florets then becoming tipped with gold, one of the best of late flowering kinds. Figured in the *Floral Magazine*
- In. Dr. Rozas.—Rose-crimson (erroneously, Dr. Rossa)
- R. Dr. Sharp (*Harding*, 1865).—Raised in 1864-5, by Mr. G. Harding, then gardener to Dr. Sharpe, Tunbridge Wells, who is said to have crossed Mad. Poggi with Golden Queen of England. Result: seven seeds, all grew, yielding Dr. Sharpe, Mrs. Sharpe, and five worthless varieties. The plants were sold to Mr. Forsyth, then of Stoke Newington, who named and distributed them. It has quilled florets of crimson-purple or rich maroon, backs of florets silvery rose, fine colour, early, and of good dwarf habit. Dr. Sharpe seems of all modern varieties to approach most nearly to the plate in *Botanical Magazine*, c. 327, which represents the first large flowered Chrysanthemum which bloomed in England
- J. Duc de Conegliano.—Large red, tasselled
- J. Duchesse de Gerolstein.—Large double flowers, parasol shape, large petals, bright rose and white, magnificent
- J. Duchess of Albany (*Salter and Veitch*, 1882).—A fine large flower with broad petals; pure white except the reverse of the outer petals, which are tinged with pale lilac
- J. Duchess of Albany (*Salter*).—(1st class, R.H.S., 1882, Jackson). In the way of Mad. B. Rendatler, with full small florets of the Dragon type, golden tipped, and suffused with reddish brown; late bloomer
- In. Duchesse de Montebello. —Syn., Stoke Newington Beauty, delicate rosy blush
- In. Duchess of Buckingham (*Salter*).—Pure white
- J. or A.I. Duchess of Edinburgh (*Veitch*).—Quilled, petals white, recurved disc, rosy lilac
- In. Duchess of Manchester.—White, striped rosy carmine
- In. Duchess of Roxburgh.—Orange and rose
- R. Duchess of Sutherland.—White
- In. Duchess of Wellington (*Salter*).—Delicate rose, tipped silvery blush
- In. Duke.—Blush
- In. Duke of Edinburgh.—Rose-lilac with lighter centre, very large and finely incurved
- In. Duke of Roxburgh.—Fine yellow
- In. Dupont de l'Eure.—Orange or amber and carmine
- P. Duruflet or Durufflet.—Rose with carmine centre
- P.e. Early Cassy.—Light, tipped lilac
- P.e. Early Rose Queen.—Pretty rosy variety of Japanese aspect
- J. Ecclatante (*Veitch*)
- P. Eclipse (1882).—Golden tinged with cinnamon-red
- In. Edith Dombtrain (*Smith*).—Lilac and blush
- P. Edouard Mieliez
- R. Edwin Landseer (*Smith*).—Rosy ruby, large and very double
- J. Elaine (*J. Downton*, gardener to Saumarez Carey, Esq.).—Pure white, fine for specimens or cut flowers, becoming lilac with age; fine, early, and free; the best for white flowers
- J. Eleanor.—Crimson and yellow
- J. Elegance.—Medium-sized flower, very double, petals thin and twisted like a corkscrew, completely curled, dark violet, enlivened with white, centre white, very distinct
- P. Elégante
- J. Elise.—Tender lilac shaded silver, florets, curled and twisted. (*Ware*, 1884.)
- P. Elise Conté.—Rose-carmine and white centre
- P. Elise Mieliez.—Deep rose, fine
- In. Elizabeth.—Incurved white, extra fine for show
- L. Emblem.—A fine large flower of a light rosy purple colour, very showy and effective
- J. Emeraude.—Large flowers, very long, twisted, drooping petals, the centre petals spiral, of a salmony brick red enlivened with yellow, centre yellow

- In. Emily Dale.—Pale yellow or straw coloured; sport from Queen of England
- In. Emily (*Clark*).—Delicate blush
- P. Emily (*Smith*).—Rosy bronze
- P.e. Emma.—Rosy purple, early
- A.l. Emperor (*Smith*).—Large blush and sulphur centre
- B. Emperor of China.—White and buff colour of silvery texture, a fine distinct thing when well grown
- J. Emperor Nicholas (*Major Carey*).—Good and showy
- A.l. Empress (*Smith*).—A very large lilac flower, with broad guard florets and light centre
- In. Empress Eugénie (*Pethers*).—Lilac, rose, or pink
- In. Empress of India.—Fine broad florets, pure white; carefully grown it is very fine. (Same as Snowball, White Queen, and Mrs. Cunningham)
- In. Empress of India.—Golden, good yellow
- In. Empress of India.—(See White Queen of England)
- In. Enamel (*Salter*).—Delicate blush white, wide incurved florets, very double and free
- In. Ensign (*Veitch*).—(Insigne, which see)
- In. Eolè.—Rosy primrose
- J. Erecta superba.—Lilac florets, fine when well grown
- P. Ernest Benary.—A full well-formed flower, white, tinted with rose, dwarf and free
- L. E. Sanderson.—A very fine flower of a bronzy red colour, showy and attractive
- P. Esmeralda (*Smith*).—Salmon-red and orange
- J. Espérance.—A fine large flower with curiously twisted florets of a rosy lilac colour, tipped with white, very distinct and beautiful
- P. Estella.—Rosy yellow. (See also Star and Stella)
- J. Ethel (*Major Carey*).—Pure white, a beautifully formed flower with broad florets, very fine; one of the best of all the white Japan varieties for late flowering, good strong habit
- P. Etoile.—(See Star and Stella)
- J. Etoile d'Or (*Bouché*) (Star of Gold).—Yellow
- P.e. Etoile Orange (*Pertués*).—Bright orange-yellow
- J. Etoile Fovel (1882).—Gold and reddish bronze, large and full
- J. Etoile du Midi.—Very large double flower, centre petals spiral, the outer ones drooping like a parasol, very broad, agate-red, enlivened with orange, first-class variety
- In. Etoile Polaire (Polar Star).—Golden yellow
- J. Etoile Toulousaine (1882).—Large and double, florets red, curled and twisted, and when they incurve it forms a golden ball, dark orange in the centre
- Eudoxie Bétel (*Pertués*).—Snow white
- P.a. Eugène Langaulet.—(See Eugène Laujaulet)
- P.a. Eugène Laujaulet.—Splendid yellow hybrid, with orange centre
- In. Eugénie.—Rose and blush, fine
- P. Eulalie Laye.—Silvery rose
- In. Euterpe.—Large blush
- P. Eva (*Smith*).—Golden yellow
- In. Eve (*Smith*).—Sulphur yellow, delicate flower
- In. Eve (White).—Good blooms, pure white, outer florets tipped with pink
- R. Excelsior.—Bright crimson, double and fine
- J. Exposition de Toulouse (*Délaux*)
- In. Exquisite (*Bull*).—A fine variety, with very full and double blossoms, of exquisite form; colour a bright golden yellow, the outer petals shaded orange and reflected salmon
- P. Fabiola.—A very dwarf-habited variety, freely producing large corymbs of pretty lilac flowers with fine broad florets
- J. F. A. Davis (*Jackson*, 1st class, R.H.S., 1882).—Dark rich crimson or maroon, florets long, thick, and thread-like, good and distinct
- In. Fabius.—Orange and salmon
- P. Fairest of the Fair (*Smith*).—Lilac blush, with silvery tips
- J. Fair Maid of Guernsey (*J. Donnton*).—Long narrow strap-petalled, very fine for cut flowers, pure white, good habit, free flowering, one of the best for late bloom
- A.l. Fair Margaret.—Delicate rose-pink, distinct colour
- In. Fair Rosamond (*Smith*).—Rosy fawn

- P. Fairy (*Salter*).—Lemon with dark orange border
- P. Fairy Nymph.—Pure white
- P. Fanferluche (*Lebois*).—Lilac and white, flowers very small, double, and produced in great profusion
- P. Fanny.—Dark rosy red or maroon
- P. Fastigioso.—Blush white
- P.a. Fanchette.—Hybrid Anemone, pale lilac, very pretty
- In. Faust.—Bronze-crimson or purple, very full, fine dwarf habit
- In. Faust.—Red, purple quilled, and an early bloomer
- In. Favourite (*Clark*).—Large rose-pink
- In. Félicité (*Bouch*).—Creamy white, centre lemon-yellow, dwarf compact habit
- P. Feu d'Amour.—Rich dark rosy crimson. (*Ware*, 1884)
- P. Fibretto (*Lebois*).—Deep orange
- P. Figaro.—Red and yellow
- P.f. Fimbriata lutea.—Olive-yellow, beautifully fringed florets
- In. Fingal.—Large flower, rose-violet florets silvery behind, very double and symmetrical, florets wide and finely incurved, a noble show flower
- A.l. Finette.—A delicate lilac-peach, with lighter centre, guard florets broad and well arranged
- P. Fioramesta.—Blush tinted rose
- P.a. Firefly (*Smith*).—Bright capuchin scarlet with high centre, a very distinct and striking colour
- P. Firmament (*Délaux*).—Clear rosy red tipped with gold
- J. Flamme du Punch (1883).—Golden cinnamon, sulphur reverse
- J. Flambeau (*Dixon*, 1882).—Round and very full, florets broad and reflexed like a parasol; of a warm orange-red, shaded with crimson. The habit is vigorous and free. (Syn., Flambeaux)
- P.a. Flavia.—Anemone, gold, fine
- L.a. Fleur de Marie (*Smith*).—Pure white, large and fine for exhibition. As cut flowers for Christmas it is well worth culture. One of the best of its class
- J. Fleur Parfaite (*Délaux*).—Rosy, very dwarf
- R. Flora.—Lilac, petals recurved
- In. Flora.—Bright lilac-peach, shading off to white; florets broad
- R. Florence.—Dark magenta
- R. Florence Mary (*Pethers*).—Bright salmon-red; medium size
- In. Florence Nightingale (*Smith*).—Pale sulphur
- P. Florence (*Smith*).—Dark cherry
- P. Folichonne.—White pencilled with yellow
- L. Formosa lutea.—Yellow
- In. Formosum.—Pale sulphur
- In. Fortune's Two-coloured Incurved.—Scarlet-chestnut and orange
- J. François Délaux (1882).—Crimson-red or brown, shaded with violet; distinct
- P. François I. — Reddish orange, very full and fine for specimens
- P.e. Frederic Marronet (*Portuzès*).—Deep golden yellow, reverse orange-red; petals imbricated. A little beauty
- P.e. Frédéric Pelé.—Bright crimson-red
- J. Fremy (*Veitch*)
- P.a. F. Rigotar (*Sch.*).—Clear amaranth with a white centre
- J. Fulgare.—See Fulgore
- J. Fulgore (*Lemoine*). — Flowers large, double-twisted, petals long, nankeen colour; the under part of petals striped with purple, giving it quite a novel appearance; very good for late bloom
- J. Fulton.—A large and fine flower, with long twisted florets of a clear bright yellow colour as rich as that of Jardin des Plantes; very good for late bloom when well grown
- P. Gaiety.—Bright red with orange border
- P. Gaillardia (*Délaux*).—Petals fimbriated, red, pointed with yellow
- P. Galatea (*Smith*).—Clear lilac
- L. Garibaldi (*Clark*).—Red-chestnut or fiery red, very large
- J. Garnet.—Light blood-red or garnet, flower heads composed of long curled florets, which form a kind of drooping fringe round an Anemone centre
- P. Garrérou.—A distinct and attractive flower of a reddish crimson colour, blotched with gold and tipped with rich yellow, the reverse of the florets golden yellow
- R. Gazelle.—Bright crimson or maroon flower tipped with yellow, an exceedingly attractive variety, of dwarf compact growth, flowers large and of fine form
- J. G. Délaux (*Délaux*).—Florets revolute, orange-red
- L. Géant.—(See Giant)

- In. General Bainbrigge (*Clark*). — Dark orange-amber and gold centre
- P.e. General Canrobert.—Good, free and early blooming, yellow; very fine for specimens
- J. General Lartique (1882).—Bright flame colour, reverse of florets golden yellow; good
- In. General Hardinge (*Clark*). — Indian red and gold shade
- In. General Slade (*Smith*).—Indian red, tipped bright orange, very large
- In. George Glenny (*Rundle*).—A sulphur sport from Mrs. Rundle, is of good habit, and makes a fine free specimen plant, carrying upwards of a hundred perfect blooms when well grown; very free and early
- J. George Gordon (*Dixon*, 1882).—A bold flower of a rich velvety red shade, brighter than Garnet (said to be a crimson seedling from Elaine)
- A.l. George Hock.—Large white
- In. George Peabody.—Pearl white, back of florets dark lilac-purple, beautifully incurved and very double, a first-rate show flower. (Figured in the *Floral Magazine*)
- A.l. George Sand.—Red, with gold centre
- In. George Stevens (*G. Stevens*, 1883). —Bright crimson florets, reverse pale gold, very fine
- R. Gerda.—A bright orange sport of Julia Lagravère
- L. Giant.—Blush white, very large
- In. Glendower (*Smith*). — Rose-carmine, large
Glitter.—Crimson-purple
- In. Globe White.—(Syn., White Globe)
- J. Gloire de Mazargue.—Rosy violet, shading to white
- P. Gloire de Montrouge.—Orange and red
- J. Gloire de St. Martin (*Bert.*).—A very large flower with long twisted florets of a beautiful rose colour tipped with pure white, the reverse of the florets carmine
- J. Gloire de Toulouse.—Amaranth, crimson and white; very fine
- In. Gloire de Toulouse.—Snow white, imbricated, large perfect form, fine white (*Salter*)
- R. Gloire d'Or (*Délaux*).—Jonquil yellow
- J. Gloire Rayonnante.—Quilled florets, satin rose coloured, shaded lilac, large and early. (Sometimes known as Hedgehog)
- In. Gloria Mundi.—Brilliant golden yellow, beautifully incurved, very high in the centre, fine dwarf habit and very free
- J. Gloriosum.—Flower-heads of large size, composed of very long slender florets of a bright orange colour, curiously twisted and curled
- In. Glory (syn. *Sarnia Glory*).—Rosy lilac
- A.l. Glück.—Golden orange or yellow, large and fine, one of the best in its class for exhibition when well grown
- P. Golden Aurore (*Hay*).—Golden yellow
- P. Golden Aurore (*Hayes*).—Bright golden sport of Aurore Boreale
- P. Golden Autumn (W.).—Yellow, free and compact habit
- In. Golden Ball (*Smith*). — Bright orange, with golden back and tips, beautiful
- In. Golden Beverley.—Golden canary colour; a beautiful show flower
- P.e. Golden Button.—Early blooming yellow
- P.e. Gold Button.—See Golden Button, also Bouton d'Or
- P.a. Golden Cedo Nulli.—Golden canary, good and free
- R. Golden Christine (*Merry*). — Golden buff, large and fine; makes a good specimen
- P. Golden Circle (*Salter*). — Bright golden orange, of dwarf habit, and fine for specimen plants
- P. Golden Cluster.—Gold
- In. Golden Dr. Brock (*Salter*). — Bright golden yellow
- J. Golden Dragon.—Curiously quilled gaping florets
- P.a. Golden Drop (*Salter*).—Gold
- In. Golden Eagle (*Davis*).—Indian red and orange. (Same as Orange Perfection). (See also Aigle d'Or, P.)
- In. Golden Empress of India.—A very fine incurved flower of a beautiful golden yellow colour
- In. Golden Fleece.—Light canary yellow
- In. Golden George Glenny. (See Mrs. Dixon)
- In. Golden Hermine (*Smith*).—Bright golden orange

- In. Golden John Salter (*Salter*).—Golden yellow changing to amber, a very fine flower
- In. Golden Lotus.—Bright golden orange
- P.e. Golden Madame Damage (*Henderson*).—Dwarf and free habit, sulphur yellow. (Syn., P.e., Golden Jardin des Plantes)
- P. Golden Madame Marthé (Syn., Miss Oubridge).—One of the best of golden Pompons
- In. Golden Queen of England (*Smith*).—Golden canary, very large and fine
- P. Golden Trevenna.—Yellow, free and good
- In. Golden Trilby.—Clear yellow, a finely incurved flower
- P. Goldfinder (*Smith*).—Golden yellow
- J. Gold Thread.—Bronze yellow or orange, with narrow twisted florets
- In. Goliah.—Large white, incurved
- P.a. Grace Darling.—Fine lilac with bluish centre
- P. Gracieuse (*Délaux*).—Rosy white, the florets near the centre rose coloured, centre golden
- J. Grandiflorum.—A fine large tasselled flower of a golden yellow colour
- In. Grandpapa.—Largened and orange
- J. Grand Sultan.—Carmine, long quilled florets
- In. Grand Sultan (*Clark*).—Amber, very large
- J. Grand Turc (*Bonamy*).—Rose-purple
- In. Grange Lodge Rival (*Pethers*).—Orange-salmon, distinct in colour and good flower when well grown
- J. Grand Turk (*Veitch*)
- P. Graziella.—Blush lilac
- In. Guernsey Nugget (*Salter*).—Yellow, fine large blooms
- J. Guillaume Délaux.—A monstrous flower, with split or forked petals, of the corkscrew form, orange-scarlet, and incurved centre petals of a golden colour; a new type
- P.a. Guilleri (*Lebois*).—Anemone disc, golden yellow ray, straw colour
- In. Hackney Holmes (*Major Carey, sent out by Cannell*).—Although the colour of this kind is in no way new, yet the lower half of the petals are of that very rich, high-coloured chestnut-red and the remaining half of a bright yellow, which renders it most desirable, and will sure to become a favourite. The main feature of this variety (and which is so highly valued in cut blooms for competition) is its long bold petals and the length and depth of gold centre, which stands up higher and more noble than many other varieties
- A.I. Handel (*Smith*).—Dark rose
- P.e. Hanum.—Early and good
- In. Harold (*Clark*).—Bright chestnut
- J. Harlequin (*Veitch*).—See also Arlequin
- P.e. Hebden Bridge.—Bright yellow. (Syns., Aigle d'Or and Berrol)
- P. Hecla (*Bull*).—Amaranth-rose, full and of free habit
- In. Hecuba.—Dark orange
- J. Hedgehog.—(See Gloire Rayonnante)
- P. Hélène.—Rosy violet. (Sometimes called Helena)
- P. Helen Lindsay (*Smith*).—Cream-white
- L. Héloïse (*Bouch*.)
- P.e. Héloïse Mieliez.—Paper white, good shape
- P.e. Hendersonii.—Yellow
- In. Henrietta.—Golden fawn
- P.e. Henrietta Himmès (*Lebois*).—White, passing into yellow
- P. Henriette.—White and carmine, fine
- P. Henri Desfosses.—Orange-carmine striped with yellow, imbricated
- P. Henry Monnier (*Lemoine*).—Lilac
- In. Hercules (*Davis*).—Very large red-carmine; this when well grown is the largest variety known
- In. Hereward.—Purple, silvery back
- In. Her Majesty (*Smith*).—Silvery bluish
- In. Hermine.—Blush, tipped purple, incurved
- In. Hermoine.—(See Hermine)
- In. Hermine Golden.—Yellow. (See Golden Hermine)
- J. Hero of Magdala (*Salter*).—Blood red, marked with orange
- In. Hero of Stoke Newington.—Rosy bluish shaded with purple, good show bloom
- In. Hetty Barker.—Good white tinged with lilac florets, quilled slightly

- J. Hiver Fleur (*Délaux*).—Very large double flowers, cream colour tinted with rosy violet; the edges of the florets and centre of the flower buff-yellow; novel and distinct
- P. H. Jacotot (*Délaux*).—Small flowers violet-carmine, or fiery violet, tipped with white, distinct
- P.e. Hippolyte Jamain (*Portués*).—Rosy carmine, reverse yellow, a globular flower with imbricated petals
- In. Holman Hunt (*Smith*).—Rose-pink, large
- H. S. Rundle (*Salter*).—Sulphur-white, pure white in greenhouse
- In. Iago (*Pethers*).—Dark purple-violet. (See Yago, Salter)
- P. Ida (*Lebois*).—Sulphur-yellow, flowers very large and double
- J. Ile Japonnaise (*Jackson*, 1882).—Pale lilac-purple, shaded pink, with light golden centre
- J. Illustration.—Large flower, colour brick-red, flamed and shaded golden yellow, petals twisted and drooping, very distinct
- P.e. Illustration.—White, shaded blush, early flowering. (Syns., Lucinda, Little Pet, Snowflake, Sportsman)
- P. Imbricatum (*Bouch.*)
- In. Imogene (*Salter*).—Rose with silvery shade
- In. Incognita.—Good bold exhibition flower, rich pink
- B. Indian Red.—Good and showy
- P. Inez.—Pure white, imbricated
- P.e. Inimitable.—Good free habit and distinct, bright amber-yellow
- In. Inner Temple (*Dale*).—An improved Refulgence, sometimes known as Arigena
- In. Ino.—Rosy blush
- In. Insigne or Ensign.—Lilac and purple
- L. Invincible.—Large tasselled white
- In. Iona.—Bright citroneyellow, beautifully incurved, high centre and a model of form
- In. Ion (*Smith*).—Pure white, large
- P. Iphigene.—Lilac-rose, the form of a Ranunculus, superb
- P. Iris (*Salter*).—Beautiful lilac-rose, tipped with pink
- In. Isabella Bott.—Pearl white, one of the finest for exhibition blooms when well grown
- L. Isaure.—Large cream and rose, very free
- J. J. Délaux (1882).—Large and double, dark brown-crimson, brilliantly flamed, extra full and good
- L. Jacques Himmès (*Lebois*).—Deep Nasturtium red, centre golden yellow
- P. James Forsyth.—Large flower, crimson and orange
- J. J. Hillier (1882).—Rich amaranth, spotted with violet, having long curled florets which droop gracefully, good
- J. James Salter (*Salter*).—Good and early, blooming with Elaine and Mrs. G. Rundle, rose-lilac, curled florets, fine for decorative uses
- P. Jane Amelia (*Smith*).—Rose-carmine
- J. Jane Salter.—White, bordered and striped with rosy lilac, large flower-heads, composed of long broad curled florets, early and very free flowering. (Illustrated in the *Floral Magazine*)
- In. Jane (*Smith*).—Silvery pink
- J. Japanese Violet (*Carey*).—Lilac, a rather late variety, full large blooms, curled and twisted, peculiarly sweet scented with the smell of Violets
- J. Japonnaise.—Broad petals of a brilliant deep yellow, distinctly spotted with rusty brown, an enormous flower
- J. Japonicum.—Claret, striped yellow
- J. Japon Fleuri (1st class, Hackney, 1882. *Dixon*).—Dark velvety maroon, with crimson and gold centre
- P. Jaquarite, golden orange, ranunculiform, fine
- In. Jardin des Plantes.—Finest of all yellows, rich pure gold tint, giving immense Dahlia-like blooms under good culture
- In. Jardin des Plantes.—Fine bronze
- P.e. Jardin des Plantes (*Polé*).—Milky white, reflected with lilac
- A.1. Jardin d'Hiver (*Clark*).—Dark rose
- Jason (*Bull*).—Amaranth
- J. J. Délaux (*Délaux*).—Large, full and double, of a dark crimson brown colour, brilliantly flamed, extra full and good
- Je. Jeanne d'Arc (1883).—White tipped lilac, an enlarged Aimée Ferrière
- P. Jeanne d'Arc.—Blush
- P.a. Jean Hatchette.—White, hybrid Anemone

- J. J. Hillier (1883).—Amaranth, marked with violet, curious and distinct
- In. Jenny Lind (*Smith*).—Rosy sulphur
- P. Jessie (*Smith*).—Orange-amber
- R. Jewess (*Clark*).—Orange and red, large
- P. Jersey Beauty (*Beauté de Jersey*)
- In. John Bunyan (*Smith*).—Bright rose
- J.s. John Rae.—Single Japanese, disc golden, ray of reddish bronze, actinoid florets. (College Garden, Dublin, 1882)
- In. John Salter (*Salter*).—Canary yellow. Like Mr. Howe
- In. John Salter, Golden (see Golden John Salter).—Deep amber-yellow, good flower
- In. John Salter.—Reddish crimson shading off to orange in the centre, a fine flower
- P. Jonas
- J. Jonathan (*Délaux*).—Beautiful variety of a rosy violet colour, flamed with white, having a nankeen centre
- P. Jonquille (*Lemoine*).—Flowers very double, and very bright golden yellow; this is a decided acquisition to this pretty class of Chrysanthemum
- J. Joseph Mahood (*Mahood*, 1883).—Orange and cinnamon, large and good
- P. Josephine Latouche.—Pure white, imbricated
- P. J. Schwartz (*Schwartz*).—Fiery red, distinct
- P. Judi (*Salter*).—Canary yellow. (See Judy)
- P. Judy (*Salter*).—Bright soft yellow
- P. Julia Engelbach (*Smith*).—Yellow with brown points
- R. Julia Grisi (*Smith*).—Light rose-pink, new colour, with odour of Violets
- R.p. Julia Lagravère.—Small dark velvety maroon or reddish brown, approaching crimson, good in colour, being superior to Old Bob
- L. Juliet (*Salter*)
- A.l. Juno.—Large white
- J. Juno (*Salter*).—Golden yellow
- J. Jupiter (*Veitch*)
- P. Justine Tessier.—Sulphur white
- P.s. Justin Tessier (*Lebois*).—Tender lilac
- J. Juvena.—A very dark thread-like Japanese, very striking
- J. Kämpfer (*Veitch*, 1882).—Bronzy red and yellow, large and good
- J. Katakana (*Délaux*).—Orange and saffron-yellow mixed, striped and lined with yellow, reverse brown
- In. King.—Light peach
- A.l. King of Anemones (*Smith*).—Large and distinct crimson-purple flower
- R. King of the Crimson (*Davis*).—Certificated in 1882. Of a rich velvety crimson colour
- In. King of Denmark (*Smith*).—Bright rose-lilac
- J. Kirakana (*Délaux*).—Very large blooms of a rosy orange washed with violet, slightly tipped with yellow
- P. Kléber (*Lemoine*).—Red, dwarf and distinct
- J. La Bien-Aimée.—White, tinted lilac, frizzed, reverse of petals rosy violet, nankeen - yellow centre
- In. La Belle Blonde (*Smith*).—Blush white, large
- P. La Carmélite.—Dwarf and pretty
- J. La Charmeuse (*Délaux*).—Rich bright amaranth, extra
- J. La Chinoise (*Boulanger*).—Orange and brown
- J. Laciniatum.—Fringed white, resembling a Japanese Pink
- P. L'Admirable (*Délaux*)
- In. Lady Blanche (*Smith*).—Cream white, early
- In. Lady Carey (*Davis*).—Large rose-lilac, with silvery back
- P. Lady Dorothy Nevill (*Smith*).—Bright yellow
- L. Lady Godiva (*Salter*).—Sulphur-white
- In. Lady Hardinge (*Clark*).—Delicate rose-pink, tipped blush, large
- A.l. Lady Margaret (*Salter*).—Large pure white, with double row of guard florets
- In. Lady Palmerston.—Primrose yellow
- In. Lady Russell (*Smith*).—Blush lilac or white with lilac points
- In. Lady Selborne (*Salter*).—Pure white. Sport from James Salter, 1881
- In. Lady Slade (*Smith*).—Delicate lilac-pink and blush centre
- In. Lady St. Clair (*Downie, Laird, and Laing*).—Like White Queen or Empress of India

- In. Lady Talfourd (*Salter*).—Delicate rose-lilac, with silvery back, florets beautifully incurved and of a shell-like form, very double and of medium size
- L. La Candeur.—Large globular flower with broad petals, pure white. One of the best whites in this section yet obtained
- J. La Fiancée (*Délaux*).—Flowers very large, very double, and beautifully imbricated, white, slightly spotted with rose colour, and beautifully fimbriated
- P. La Fiancée (*Lemoine*).—White slightly tinged with rose
- J. La France (1882).—Crimson-bronze, lit up with flame colour
- P. La France.—Good fringed white
- J. La Frisure (*Délaux*).—A fine large full flower with peculiarly twisted and curled florets of a soft rose colour marked with white, the under side of the florets being of a silvery shade
- J. La Japonnaise.—See Ile Japonnaise
- E.a. Lais.—Anemone, purple and gold
- In. Lalla Rookh (*Pether*).—Dark ruby rose
- P. La Mascotte.—First-class flowers, imbricated and distinct
- J. L'Amie du Cœur.—A variety with very small flowers, of beautiful form and very double, with long curled and twisted florets of a beautiful rose colour, tipped with white and silver on their reverse side; the centre of the flower yellow; exceedingly pretty.
- P. La Neige (*Bouch.*).—Snowy white, full (syn., Boule de Neige)
- J. La Nuit (*Lacroix*).—Fine rose colour, yellow behind, distinct and curious
- J. La Nympe.—A very pretty flower, of a delicate peach colour shaded with white
- P. La Petite Brunette (*Salter*).—Fawn
- P.e. La Petite Marie (Little Mary, *Ware* 1882).—Very dwarf and compact, and most floriferous, forming a dense mass of white button-like flowers a foot in height
- P. La Pureté (*Bouch.*).—White, finely fringed, and good late bloomer
- P. Lara.—Cream, tipped cherry
- P. La Rousse.—Orange-red
- J. Late Duchess.—Very late, but a shy bloomer
- P. La Sultana.—Bright lilac
- P.e. Late Flora (*Ware*, 1884).—Golden flowers in clusters, fine for cutting
- L. Latona (*Smith*).—White, washed with sulphur-yellow
- J. Laurence.—Large flowers, very double, ground colour delicate rose, strongly lit up with white, speckled with violet-rose, golden centre
- Laurinda.—Fine rose-purple
- P.e. Lavallée (1883).—Good white
- P.e. La Vierge (*Boucharlet*).—White, with sulphur centre
- P.e. La Vogue.—Bright gold or yellow
- L. Le Bourreau.—Red, tipped gold, very double
- L. Leda (*Clark*).—Large white, late flowering variety
- In. Le Grand.—Extra large, florets broad and stout, elegantly incurved, colour delicate rosy peach, shading to fawn, the florets next the centre faintly striped
- P. Le Jongleur.
- P. Lilas (*Délaux*).—Lilac-rose, dwarf and free
- In. L'Emir.—Light reddish crimson, incurved, fine show bloom
- P. Lemoine
- P. Le Nain Bébé.—Rosy lilac, with the odour of Violets
- P. Lenard. Yellow, tipped with purple, novel and good
- J. Le Nègre.—Black, tipped red, lovely in colour, often showing a bright green centre. See also "Negro Boy" (*Clark*), incurved
- In. Léonidas (*Lemoine*).—Flowers very large, finely imbricated, colour a beautiful sulphur yellow; a decided acquisition to these useful autumn flowering plants; an extremely fine exhibition variety
- In. Léon Leguay.—Lilac
- P. Leonora (*Bull*).—Orange bordered with red, fine and early flowering
- J. Leopard (*Salter*).—White, slightly rosy
- P. Le Parnasse.—Rose and yellow, shaded lilac or violet
- In. Le Prophète (*Salter*).—Golden fawn, large flowered
- P. L'Escarboucle.—Very fine yellow
- L. Les Gobelins (*Pelé*).—Rosy lilac, centre white
- P. Lilac Cedo Nulli.—Rose-lilac, fine for specimen

- In. Lilac Princess.—Rosy lilac, good flower
- J. Lilacinum roseum.—Rosy lilac, with broad florets; a very fine large flower
- P. Lilac Gem.—Rosy lilac Pompon
- J. L'Île des Plaisirs (*Délaux*).—Red, striped yellow and tipped with gold, extra
- P. Liliuputian.—Good white, full flower
- P. Lily Pithon (*Lebois*).—Deep amaranth
- J. L'Incomparable (*Délaux*).—Petals of spiral form, yellow, flamed with reddish brown, base of centre petals a showy crimson, distinct
- J. L'Inconnu (*Délaux*).—Buff colour, reverse yellow
- P. Lingot d'Or.—Gold
- P.e. Little Bob.—Maroon-red. (See also Dr. Bois Duval and Scarlet Gem)
- In. Little Harry (*Smith*).—Bright golden amber, very double, of medium size
- P. Little Mary.—(See La Petite Marie)
- P. Little Pet (*Smith*).—Incurved, blush Pompon
- In. Little Rosetta (*Smith*).—Amber, incurved
- P. Lizzie Holmes (*Smith*).—Canary yellow, with rosy tint
- In. Lord Alcester.—Primrose-yellow, of fine form. (See Princess Imperiale)
- J. Lord Beaconsfield (*Veitch*, 1882).—Reddish-shaded cerise
- R. Lord Clyde (*Smith*).—Bright glowing crimson
- In. Lord Derby (*Clark*).—Very dark purple, florets broad and finely incurved, flower-heads globular or cone-shaped; a most splendid variety either for cut blooms or specimens
- In. Lord Elgin (*Clark*).—Rose, large
- In. Lord of the Isles (*Clark*).—Rosy orange
- In. Lord Palmerston (*Smith*).—Rose-amaranth, tipped silvery blush
- In. Lord Raglan.—Dark purple
- In. Lord Ranelagh (*Salter*).—Light red orange
- In. Lord Stanley.—Large orange-amber
- In. Lord Wolseley (*Orchard*, 1882).—A bronze-coloured sport from Prince Alfred (1st class R.H.S. 1882), fine back row bloom
- L. L'Orient (*Lemoine*).—Large double red, very fine
- J. L'Or du Rhin (1883).—Pure gold, thick and free
- L. Lothaire.—Yellow
- In. Lothario.—Light ruby red, fine incurved
- In. Louis Barthère (*Bonamy*).—Red-crimson
- A.I. Louis Bonamy.—Large lilac
- P. Louise.—(Syn., Louise de Jersey)
- P. Louise Piton.—Silvery blush
- P. Louise Schwartz (*Sch.*).—Small milk-white flowers, shaded with lilac-purple
- P. Louis Tessier (*Lebois*).—Purplish lilac
- In. Lucidum.—Very early white (syn., Diadem)
- J. Lucifer (*Salter & Veitch*, 1882).—A very large flower, petals tubular, one half their length, limb vermilion-red, reverse and also tube nankeen-yellow, very curious and distinct
- P.e. Lucinda (*Salter*).—Rosy lilac or blush
- In. Lucius.—(See Lusias)
- P. Lucrèce.—Orange and brown, tipped with gold
- In. Luna.—Golden yellow, with small brown tips; a fine show flower
- P. L'Unique (*Délaux*).—Lilac, strongly striped with white, reverse white
- In. Lutea formosa.—Golden-yellow (Syn., Delight).
- J. Lutea striata.—Good and showy
- In. Luther (*Smith*).—Large rosy crimson
- P.e. Luxemburg (*Pelé*).—Salmon-orange, or bronze-yellow (syn., Mrs. Wood)
- P.e. Lyon.—Rose-purple, good
- In. Lysias (*Smith*).—Red-orange
- P.a. Mabel.—Rose
- In. Mabel Ward (1882).—Sent out by Cannell. A golden yellow sport from White Eve. (First exhibited in 1881 by Mr. Martin)
- J. Macary.—White, tinted a warm rose colour, very large and broad petals (See Dr. Macary)
- J. MacMahon.—An enormous flower with large broad florets; colour a beautiful rosy lilac, with white back; a very fine, free flowering, dwarf-growing variety
- In. Madame Albert Puymirol.—Rosy orange and gold back
- P.e. Madame Alphonse Dufoy (*Pelé*).—White

- L. Madame Andry (*Lebois*).—Cream edged with carmine, flowers of medium size and very double
- P.e. Madame Bachoux. — Lilac-rose, yellow centre
- J. Madame Bertier Rendatler (*Bert.*).—Large flowers very double and of fine form; nankeen shaded with rose; quite a novel colour; a free blooming and attractive variety
- In. Madame Boucharlet (*Délaux*).—Incurved white
- J. Madame Boucharlet (*Lacroix*).—Canary-yellow, fine
- J. Madame Boucharlet Ainé.—A magnificent flower with long quilled florets of a beautiful canary yellow colour; it is one of the finest varieties of this colour
- J. Madame Brun (*Jackson*, 1st class, R.H.S., 1882).—Quilled pink, with flat-pointed petals, soft and pretty
- A.l. Madame Cabrol. — Large blush, florets variously quilled, fine for cut flowers. (1884, *Ware*)
- L. Madame Camerson. Crimson, tipped gold
- P. Madame Carnac.—Lilac with yellow centre
- Madame C. Audiguier.—Mauve-pink, large and fine blooms
- P.a. Madame Chalonge.—Blush, and yellow centre
- L. Madame Charles Lebois (*Lebois*).—A very beautiful yellow, with white margin
- In. Madame Chaté.—Broad petals, white, lined violet, cream-coloured centre
- L.a. Madame Chaté (*Portués*).—White and lilac, centre cream
- Madame Chauvière (*Smith*).—Large, incurved, blush
- J. Madame Chinard (*Ch.*).—Flowers enormous, petals being long towards the exterior, and diminishing at the centre of flowers, of a fine bright rose, with a silvery white reflection, sometimes striped with deep rose; a most distinct and beautiful variety
- J. Madame Clémence Audiguier (*Marrouck*).—Tender rose, centre petals spiral or twisted, centre white
- L. Madame Clos.—Rose-lilac, very double
- J. Madame Castex Desgrange (*Ware*, 1882).—Flowers open, sulphur, and change to pure white. Good for open-air culture and for cut flowers or for pot culture, being dwarf, early, and of good habit.
- P. Madame D'Arnaud.—Pale purple, bright and pretty
- J. Madame Deville.—Florets creamy white, striped rosy violet (*Ware*, 1884)
- L. Madame Corbay
- L. Madame de Fleury
- L. Madame de Merbeieux
- P. Madame de Merbeieux.—Gold
- P. Madame de Montal (*Bonamy*).—Anemone, disc golden yellow, ray blush (Syn., Madame Montels)
- P. Madame de Soulangis (*Lebois*)—Amaranth
- P. Madame de Vetry.—Rose-lilac
- P. Madame de Wildeman
- P. Madame Domage.—Silver blush, changing to white, very double
- L. Madame Domage (*Lebois*).—Flowers snowy white, large and double
- P.e. Madame Dufoy.—White, lemon centre (Syn., P.e., Jardin des Plantes)
- J. Madame Emile Dufour (*Marrouck*).—Long twisted florets; bloom rose-pink, centre orange
- P. Madame Eugène Domage.—Pure white
- P.s. Madame Ferrand (*Ferrand*).—Tender lilac, almost white
- P. Madame Fould, cream
- J. Madame Franconette Dufour (*Marrouck*)
- A.l. Madame Goderau.—Sulphur
- P.a. Madame Granie (*Bonamy*).—Anemone, disc canary-yellow, ray pure white, fine
- L. Madame Graeme.—Large white
- P.a. Madame Guenin (*Bonamy*).—Anemone, disc and ray cinnamon
- R.c. Madame Guillaume.—(Syn., Christine and Ne Plus Ultra, which see)
- L. Madame Laborde
- In. Madame Lebois.—Delicate pink and yellow
- P.e. Madame Lemaire, white, changing to rose
- J. Madame Lemoine.—Salmon and rose, good and distinct flower
- L. Madame Leo.—Ivory white, very double

- P. Madam Martha.—Pure white, very fine
 Madam Martha.—Golden (See Golden Madam Martha)
 Madame Marthé.—See Madam Martha
- P.a. Madame Montels.—Hybrid white with yellow centre, very distinct and beautiful
- P. Madame Mazerés.—Beautiful silvery lavender
- L. Madame Pagés (*Marrouch*).—White, shaded with orange red
- P. Madame Pauline Deschamps.—White and carmine
- P.e. Madame Pecoul (*Polé*).—Dark violet-rose (Syn., Madame Piccol and Madame Pecoval, Mr. Piercy, etc.)
- P. Madame Pépin.—Red and orange
- P. Madame Pichaud.—White and crimson
- In. Madame Poggi (*Smith*).—Chestnut crimson
- J. Madame Rieux (*Laoriois*).—Has been called a Japanese Pompon; florets lilac above, white below, fringed, and arranged into a full compact bloom
- J. M. R. Larios.—Good and showy
- P. Madame Rival Verne.—Broad white florets reflexed, the central florets yellowish, distinct and free
- P. Madame Roussillon.—White, tipped rose
- J. Madame Roux (*Laoriois*).—Florets red-amaranth, reverse white, lacinate florets
- P.a. Madame Sentir.—Pure white
- L. Madame Tezier.—Enormous globular double white flowers, extra
- P. Madame Victor Verdier.—Rose and blush
- L. Madonna (*Clark*).—Large, pink, tasselled
- J. Magnum Bonum.—Rosy lilac with lighter bark; the flower-heads, which are very large, are composed of broad flat fringed florets
- P. Maid of Saragossa (*Smith*).—Rose and blush
- B. Maize (*Spinks*, 1882).—White, shaded straw colour, early and of good habit, fine for cut-bloom, one of the best early kinds (? Mad. O. Desgrange)
- P. Malte Brun.—Light pink, half incurved, distinct
- J. Malvæflorum (*Délaux*).—Of a lovely fresh silvery mauve colour are the lower part of the petals, and towards the points they are gradually passing to white; novel and pleasing; should not be "stopped"; is a good late bloomer, turning pure white
- I. Marabout.—Pure white of full size, elegantly fringed like a double white Pink. (See also New Marabout.)
- P. Marc Aurèle.—Orange and red shaded, or purple tipped with gold. (See Marcus Aurelius)
- L. Marceau.—Hybrid, rose, bordered white
- L. Marchioness.—Large blush Marchioness of Lorne.—Rosy
- P. Marcus Aurelius.—(See Marc Aurèle)
- In. Maréchal Duroc.—Fine rose and lilac
- L. Maréchal Lannes.—Dark blood red
- L. Maréchal Niel (*Bonamy*).—Large, red and orange
- A.l. Margaret of Norway (*Smith*).—Light red and gold centre
- A.l. Margaret of York.—Sulphur yellow (see also Marguerite de York)
- In. Margaret Vatcher (*Smith*).—Large rose-pink, and light centre
- J. Margot (1883).—Lilac and white, ribbon-like florets
- A.l. Marguerite d'Anjou.—Anemone, rankeen, very fine
- P.a. Marguerite de Col.—Purple, yellow centre
- P.a. Marguerite de Valois.—Anemone, white and yellow
- L.a. Marguerite de Versailles.—Anemone blush
- A.l. Marguerite de York.—Canary and dark yellow
- J. Marguerite Monarch.—Broad flat florets, creamy yellow behind, ruby red above; large full flowers
- P. Marie Crouzat (*Lebois*).—Florets claret, laced with white; a beautiful little gem
- P. Marie Dupuy.—White, tipped with rose
- P.a. Marie Stuart.—Lilac blush with high sulphur centre
- P.a. Marietta (*Lebois*).—Disc golden yellow, ray orange
- L. Marie Vozel
- P.e. Marquis d'Alfarasi (*Bonamy*).—Yellow changing to white, flowers very small and produced early; a very pretty variety

- J. Marquis of Lorne.—Reddish carmine, spotted and tipped with yellow; a bold semi-globular flower
- In. Marquis de Molleville.—White, large incurved, very fine show flower
- In. Mars (*Smith*).—Light red
- P.e. Marseille (*Polé*).—Rose-lilac
- P. Mary Lind (*Smith*).—Sulphur bluish
- J. Mary Major (*Veitch*, 1882).—Pure white
- P.a. M. Astic (*Lebois*).—Bronze yellow
- In. Mazeppa.—Shaded red
- J. M. Barat (*Délaux*)
- J. M. Bonamy (*Lacroix*).—Peony-shaped clear amaranth, petals frizzed, curving inwards to the centre
- P. M. Bouchariat (*Délaux*)
- J. M. Boyer.—Silvery lilac, or rose, very fine. (1884)
- J. M. Brunet.—Bold flat florets, white and bluish
- P. M. Camille (*Dél.*).—Small fringed flowers, clear rosy amaranth, tipped with white
- J. M. Castel (*Dél.*).—Flowers large double, formed of long twisted florets, fiery red above and yellow below
- J. M. Charles Hubert.—An enormous flower, very double, with vertical florets, of a canary yellow colour; producing large trusses of from eight to ten very fine flowers
- J. M. Chaté (*Pertués*).—A beautifully-formed quilled flower; outer florets of a rosy peach colour; central florets white lightly tipped with rose
- J. M. Cherveul.—Rosy crimson
- MacMahon.—Lilac-rose, back of petals white
- J. M. Croussé.—Crimson, backs of florets yellow, singularly bright and distinct; central florets incurved and of a golden yellow colour
- J. M. Délaux (*Dél.*).—A very fine, full, large flower of a rich reddish crimson colour; the florets, which are long and twisted, are of a beautiful golden yellow colour on their under side
- J. M. Henry Jacotot.—Brown-crimson or velvet. (1884)
- J. M. Moussillac.—Dark crimson with a yellow centre, large and distinct
- J. M. Tarin.—Silver rose
- J. Mdle. Anna Délaux (*Délaux*).—Twisted florets, like a corkscrew, of a milk-white colour, delicately tinted rose; a real gem
- J. Mdle. Augustine Gauthent.—Rose and flame colour, bordered white. (*Ware*, 1884)
- P. Mdle. Celestine Philopal.—Yellow
- L. Mdle. Croizette.—Large, bright, rosy shaded flowers
- J. Mdle. L. Sabatie.—Bright rose-violet, lit up with white; large, full, good. (1882)
- J. Mdle. La Croix (*Jackson*, 1883).—Pure white, fine and distinct
- P.e. Mdle. Jolivart.—Pure white, large and fine
- P. Mdle. Marthé.—White (see Madam Martha)
- P. Mdle. Marthé.—Golden (see Golden Mad. Martha)
- P.a. Mdle. Massot.—Anemone, the ray rosy crimson, the disk rose and yellow; fine
- J. Mdle. Moulise.—Good and showy
- P. Mdle. Opoix
- J. Mdle. Savigny (*Dél.*).—Flowers large and full, florets contorted, ribbon-shaped, flowers of a rose or mauve colour, with a white centre
- J. Mdle. Toulouse (*Dél.*).—Incurved and beautifully frizzed, of a fresh rose colour, centre a yellowish white; flowers in bouquets of four and five together, very fine
- P. Mdle. Zélie Decaen (*Lebois*).—Flowers snowy white, and very double; superb
- L. Mdle. Domage.—Dark yellow
- P.a. Medora.—Rose-lilac
- P. Medusa (*Salter*).—Deep orange-brown with crimson tint
- J. Meg Merrilies.—Sulphur-yellow, large and late blooming; one of the best
- P. M. Elie.—Silvery amaranth, white behind
- In. Memnon (*Downton*).—Peach or rose, and lighter centre, each floret being tipped with lilac
- J. Meteor (*Salter*).—Bright golden yellow, changing to orange; florets very long and curiously curled; a very early and free-blooming variety of the actinoid class
- J. Meteor. Yellow, with purple backs to the florets; large and fine

- P. Metheore (*Portuaise*).—Rose with white centre miliricated and frilled: fine
- J. M. Eugenie Pourquia.—Flowers very double, with very long thin twisted petals, completely curled, colour salmony red, enlivened with gold, one of the best types of Japanese; unique variety
- P.e. Mexico (*Pelé*).—Bright yellow
- P. Meyerbeer.—Rose-purple
- P. M. Gilly-Blanc (*Bouch.*)
- P. Michelet (*Lem.*).—Rosy buttons
- J. Mignonette (*Veitch*).—Good late bloomer
- P. Miniata (*Bouch.*).—Creamy white
- Minerve.—Creamy rose
- J. or A.I. Minnie Chaté.—Creamy bronze, curiously twisted (like a large-flowered Anemone)
- P. Minnie Warren (*Salter*).—Rosy blush, with yellowish centre
- P. Mirabelle
- P. Mira (*Lebois*).—Pure white, very double
- P. Miranda.—Bright rose, fringed
- J. Miron (*Délaux*).—Light yellow, veering to pale red
- L. Miss Cullingford (*Salter*)
- A.I. Miss E. Boustead.—White
- P. Miss Eleanor.—Reddish cinnamon
- A.I. Miss Eyre.—Blush, with yellow centre, medium size, dwarf habit, and very free
- P. Miss Fox.—Golden yellow
- In. Miss F. Smee.—French white
- In. Miss Hope.—Delicate lilac
- L. Miss Huffington (*Salter*)
- Miss Jeannie (*Todman*), 1st Class Certificate.—A sport from Anna de Belocca. Colour rich canary yellow. Is perfectly distinct and of unequalled value for decorative purposes and specimen culture, free blooming and very sweet-scented, and larger in size than the parent
- P. Miss Julia (*Smith*).—Good bronze or chestnut-coloured variety
- L. Miss Kate (*Smith*).—Delicate lilac
- P. Miss Lavinia Hutchings (*Langlois*, 1880).—Blush white, full rosettes one inch in diameter; florets tipped with purple behind
- L. Miss Maréchaux (*Salter*).—Good late blooming variety
- A.I. Miss Margaret (*Salter*).—Pure white Anemone, with full high centre
- In. Miss Mary Morgan.—Good pink, same as Pink of Perfection
- P.a. Miss Nightingale (*Brown*).—Blush, with white centre; very full
- P. Miss Oubridge.—Canary coloured sport, from Mdle. Marthé (see Golden Madam Martha)
- P. Miss Prim.—Hybrid, clear yellow
- In. Miss Slade (*Smith*).—Pale sulphur
- P. Miss Talfourd (*Smith*).—Pure white
- In. Miss Wetherall.—White
- P. Miss Wheeler.—Clear rosy cinnamon
- J. Mons. Astorg (1883).—Large flat florets in the way of Elaine
- J. Mons. Ardenne (*Lacroix*).—Fine rich bloom
- J. M. Burnet.—Pale pink, good
- J. Mons. Henri Jacotot (*Jackson* 1883).—Orange-purple, and gold-shaded
- J. Mons. Juan Cruz de Eguileor.—Large flowers, with long, thin, twisted petals, drooping edges, then incurving towards the centre, forming a large ball of beautiful golden yellow, which contrasts perfectly with the colour of the flower, which is a most brilliant crimson strongly marked with vivid flame. The colouring of this variety is the most brilliant in existence; extraordinarily fine
- P. Mons. Le Cte. Le Conteux (*Bouch.*)
- J. Mons. Lemoine (*Délaux*).—A large double flower of rich reddish crimson colour, tipped with bright yellow, golden centre, the reverse of the florets buff yellow; distinct and striking
- P. Mons. Signet (1883, *Veitch*).—Deep purple, fine and full
- J. Louis Barrière (*Délaux*).—Dark velvety purple, bordered with golden yellow
- J. Mons. Nardy.—Rosy red, back of petals white
- J. Mons. Maney (*Délaux*).—Good double flowers, violet, shading to white
- J. M. Marouch (*Mahood*).—Crimson and gold
- J. Mons. Moussillac (1883).—Style of James Salter, dull orange-red
- P. Mons. Montariol (*Lacroix*).—Very full amaranth, tipped white
- J. Mons. Romain (1883).—Deep gold thread-like plants, good
- P. Model.—Lilac-pink. (See Model of Perfection)

- J. Model.—Crimson and bronze
P. Modèle.—White
P. Model of Perfection (*Forsyth*).—Lilac and white, very full. (See also Model and Modèle)
In. Monarch.—Dark Indian red; back of the florets golden yellow; finely incurved and of immense size; a magnificent show flower
J. Mon Bijou (*Délaux*).—Mahogany brown, pointed with golden yellow, reverse yellow
P. Mon Caprice (*Rendatler*).—Striped purple
P. Mon Caprice (*Délaux*)
In. Monica (*Smith*).—Golden orange
J. Mons. Baco.—Vivid crimson and orange with golden centre, two colours in contrast like a Cocardeau Aster. (See Commandant Baco)
J. Mons. Boyer (Hackney, 1883).—Large rosy lilac
J. Mons. Brunet (1883).—Pink, large and full
J. Mons. Castel (*Veitch*)
J. Mons. Chaté.—Light rose, tipped gold
P. Mons. Chevreaul.—Rosy lilac, tipped yellow
J. Mons. Délaux (*Veitch*)
J. Mons. Desbrieux (*Jackson*).—1st class, R.H.S., 1882).—Bronze or orange, full, large narrow florets.
L. Mons. Deschamps.—Canary yellow, flowers large, for specimen growing
J. Mons. J. C. Eguileor (*Veitch*)
P.e. Mons. de Soulages.—Rosy purple
In. Mons. Elle.—Amaranth, reverse of petals white
J. Mons. Lemoine (*Jackson*, 1879).—Medium sized bi-colour, outer florets yellow, inner ones deep bronzy red; effective
J. Mons. Lucian Bertheier (*Veitch*).—Good
J. Mons. Plancheron (*Veitch*)
J. Mons. Richard Lariss (*Veitch*)
P. Mons. Ulrich.—Purple, tipped white
P. Mont d'Or (*Bouch.*).—Golden orange
P. Mont Etna.—Red (See Mount Etna)
P. Montgolfier (*Lemoine*)
L. Mont Vésuvé.—Large fiery red
In. Mount Edgcombe.—Transparent sulphur white, delicately tinted with rose; very large, double and beautifully incurved.
P. Mount Etna.—Red, fine colour (see Mount Etna)
In. Mulberry (*Downton*).—Dark Mulberry
P. Musidora (*Smith*).—Liliputian, chestnut-red and orange
P. Mustapha.—Dark crimson-brown, very good
P.a. Mr. Achille Dutour.—Pure white
P.a. Mr. Astie.—Golden yellow, dwarf and splendid form
J. Mr. Barnes.—Fine Buttercup yellow
P. Mrs. Bateman.—Bright rosy cinnamon; improved sport from Miss Wheeler
J. Mrs. Townshend (*Mahood*, 1883).—Bright orange-red or maroon, narrow twisted florets
In. Mr. Broom.—Dark red.
In. Mr. Brunlees (*Smith*).—Large Indian red, or maroon, gold tips
In. Mr. Bunn (1881).—A root sport from Beverley, of the same habit, but a better and a longer petal, deeper colour, and altogether a finer flower; yellow with broad incurved florets
A.1. Mr. Cole
In. Mr. Cobay.—Ruby red, fine flower. It is a sport from Prince of Wales; good and free
In. Mr. Cullingford.—Dark purple
P. Mr. de Marsac.—Red-orange
L. Mr. Deschamps.—Canary yellow
In. Mr. Evans.—Dark chestnut (Syn., Oliver Cromwell)
P.a. Mr. F. Smee.—Pale rose
L. Mr. Gladstone.—Dark red-chestnut, fine distinct colour, very effective; more varieties in this way are to be desired
L. Mr. Howe.—Orange-amber
J. Mr. Bienx.—Florets narrow, rich orange
In. Mr. Jay.—Red-orange
In. Mr. James Laing
J. Mr. J. Starling (1882).—Rose-lilac, shaded white, dark crimson centre, good
P. Mr. Lefevre Valère.—Chrome yellow
P. Mr. Meniere
P. Mr. Minet.—Red orange border
P.e. Mr. W. Piercy.—Mr. Piercy is the champion grower of this race, according to Mr. Cannell; blood red; a sport from M^{me}. Pecoul, and sometimes called Red Piccol, a corruption of Pecoul
In. Mr. Murray (*Smith*).—Violet-rose, very full
P. Mr. Bateman.—Hybrid Pompon; sport from Miss Walker

- Mrs. Brunlees (*Smith*).—Delicate rose-pink, with a light centre
- J. Mrs. C. Carey (*Carey*).—White, much curled, large blooms, exceedingly strong grower with bold foliage; will make exhibition plants as freely as Fair Maid of Guernsey; it is one of the best of late blooming varieties, as Mr. Cannell says: "It will not bloom until it has had its Christmas holiday." Quite distinct, and worthy of careful culture
- P. Mrs. C. Langlois (*Langlois*, 1880).—Rosy pink, blooms 2 inches in diameter, florets broad, full centre
- P.e. Mrs. Cullingford (*A. Salter*).—Large pure white flower, very useful for cutting and for decorative purposes generally
- In. Mrs. Cunningham.—Large, white
- In. Mrs. Dixon.—Fine form, being a golden sport from George Glennys, very good and free in habit; a sure bloomer. (Also known as Golden George Glennys)
- P. Mrs. Dix (*Smith*).—Blush, bordered rose
- P. Mrs. Dix.—soft blush, bordered with rose
- Mrs. E. Miles (*Smith*).—Bright yellow, incurved
- L. Mrs. Forsyth
- R. Mrs. Forsyth.—White
- In. Mrs. Heale.—Fine bold flower, good for exhibition
- In. Mrs. G. Parnell.—White, tinted yellow
- In. Mrs. G. Rundle.—Splendid white; one of the very best of all incurved white varieties for all purposes. It is particularly good in habit when well grown; flowers are perfect
- P a Mrs. Gush.—Bright rose
- In. Mrs. Hatburton (*Smith*).—Slightly quilled florets, but beautifully incurved, forming a fine deep bloom, primrose-white
- In. Mrs. John Crossfield (*Veitch*, 1st class, Liverpool, 1882).—A sport from White Globe, having large, shapely blooms of a rosy pink shade
- P.a. Mrs. Shirley Hibberd (*Smith*).—Rose-lilac and gold centre
- P. Mrs. Huffington.—White, tipped with pink
- P. Mrs. Hutt.—Reddish brown
- In. Mrs. Kaines (*Davis*).—Transparent blush, a beautiful late-flowering variety
- J. Mrs. Marigold (*Gallier*, 1881).—A Japanese variety, having pink or flesh-coloured florets, long, narrow and full, but smaller than Elaine; sport from Miss Mary Morgan
- In. Mrs. Miles.—Yellow
- Mrs. Moggridge
- A.l. Mrs. Pethers (*Pethers*).—Rose-lilac
- In. Mrs. Sharpe (*Harding*, 1865).—White, tipped with rose; *vide* Dr. Sharpe for parentage, etc.
- L. Mrs. Stewart.—Brassy amber
- L. Mrs. Major.—Deep rose
- J. Mrs. Townshend (*Mahood*).—Claret-red
- P. Mrs. Turner (*Smith*).—Pure white
- Mrs. Walter Butters.—Sport from Princess Beatrice and like it in form; reddish brown and amber; distinct
- P.a. Mrs. Westwood.—Silvery lilac
- In. Mrs. W. Holborn (*Smith*).—Ivory white, large
- In. Mrs. W. Shipman.—Fawn colour, quite distinct
- P.e. Mrs. Wood.—Good and free, of a bronzy yellow (*Syn.*, Le Luxemburg)
- P.a. Mrs. Wyness (*Wyness*).—Rose-lilac, high centre
- P. Mr. Van Houtte.—Chestnut
- In. Mr. Wyness (*Pethers*).—Violet-puce, very rich colour
- P.s. Mr. Schmidt (*Pelé*).—Golden yellow, bordered with crimson
- A.l. Nancy de Sermet (*Smith*).—White
- J. Nagasaki.—See Nagasaki Violet
- J. Nagasaki Violet.—Deep rich violet-purple, sweet scented
- L. Nandee
- P. Nanon.—Bright orange
- P.e. Nanum.—Dwarf and early, silver, blush, or flesh colour
- J. Ne Plus Ultra.—Dark chamois, spotted with yellow, well formed and very double
- In. Negro Boy (*Clark*).—Dark crimson (See also Le Nègre Japonnais)
- L. Nell Gwynne (*Smith*).—Rosy peach
- P. Nelly.—Good free, late white, tinted sulphur, or orange in the centre
- R. Ne Plus Ultra.—*Syn.*, Christine
- P.s. New Departure (*Cannell*, 1882).—Single Pompon, disc golden, ray of flat white florets
- In. Nil Desperandum (*Smith*).—Large dark red, shaded with orange

- P. New Marabout (1883).—White and pale lilac
- P. Ninette.—Liliputian, sulphur rose, very double and fine
- In. Niobe.—A pale sport of Nil Desperandum
- P. Nitida.—Blush white
- L. Nonpareil.—Rosy lilac
- J. Nora (*Délaux*).—Pink or peach
- J. Norah.—See Nora
- In. Norma.—Ivory white
- In. Novelty (*Clark*).—Good early kind, large white, suffused with rose
- J. Nuit D'Automne.—A very fine variety with partially incurved flowers of a fiery crimson-amaranth colour
- J. Nuit d'Hiver (*Délaux*).—Saffron bronzed, shaded with brown, pointed with golden yellow, reverse saffron-yellow, dwarf and free
- J. Nymph.—See La Nympe
- P.e. Observation (*Pelé*).—Red and salmon
- J. O Kiku.—Buff, sport from Bismarck
- P. Olivar (*Bull*).—Lively orange
- In. Oliver Cromwell (*Smith*).—Dark chestnut-red, lighter in the centre (See Mr. Evans)
- J. Oracle (*Lemoine*).—Large, flat, erect florets, broader than those of Ethel, and of a rosy lilac colour, inclining to purple
- R. Orange Annie Salter.—A sport raised by M. Ozard, and sent out by Mr. Salter; orange-yellow, one of the best for specimens
- P. Orange Beauty (*A. Salter*).—Flowers in a dense cluster of four or more at the extremity of every shoot; bright yellow and orange
- P. Orange Boven (*Salter*).—Dark orange
- In. Orange Brilliant.—Bright orange
- In. Orange Perfection (*Smith*).—Salmon-orange
- P. Oranger.—Orange
- L. Orlando (*Smith*).—Rosy buff
- J. Orphée (*Délaux*).—Reddish crimson, very fine var.
- L. Ossian.—Large rose
- In. Othello (*Smith*).—Dark rose
- P. Pablo (*Bull*).—Hybrid Pompon of full size, rose tinged with purple, and finely fringed
- L. Pan (*Clark*).—Large red-salmon
- In. Pandora (*Smith*).—Rosy nankeen
- P. Pandara (*Bonamy*).—Deep crimson, spotted orange
- J. Parasol (*Lacroix*).—Flowers large, of a golden chamois tint, and distinct in form
- J. Patrolin (*Délaux*).—Large flowers, florets contorted or twisted, of a rosy lilac tint, white behind
- J. Paul Lecroix (*Lacroix*)
- R. Peach Christine.—Rosy peach. (See Ne Plus Ultra)
- In. Pearl (*Smith*).—White pearl, pure white
- P. Pearl.—Deep rose
- J. Perle des Blanches (*Veitch*).—White, very fine
- P.a. Perle.—Pearly white, fine and free
- P.e. Pecoul (*Madame*).—See Madame Pecoul
- L. Pelagia (*Smith*).—Bright orange-cinnamon, of dwarf habit
- In. Penelope (*Clarke*).—Rosy orange
- J. Père Délaux.—An attractive variety with immense flowers of a rich velvety reddish brown colour; remarkably showy
- J. Père Délaux (*Délaux*).—Rich velvety brown or maroon colour
- P. Perfection.—See Cadic's Perfection
- Pericles.—Purple, edged with gold, extra
- P. Perle des Beautés (*Délaux*).—Flowers ranunculus-like, imbricated, fiery amaranth, velvety, tipped with dark brown
- J. Perle des Blanches (*Jackson*, 1882).—In way of Fair Maid of Guernsey, but distinct; white
- P. Pertuzés (*Bull*).—Nankeen-orange
- J. Peter the Great (*Major Carey*).—Fine large flowers of a lemon-yellow colour; very free. One of the best, good alike in habit and flower. Most useful, and a sure bloomer. (Also known as Czar)
- J. Petit Frisi (1882).—Soft rosy carmine, centre of white and gold; very distinct and good
- J. Petit Nobert (1882).—Rosy carmine shaded with silvery rose, and bordered with pure nankeen yellow. Backs of the florets golden; good
- L. Phaeton.—Large dark golden orange
- L. Phare de Messina
- L. Phidias, New.—Rose and blush
- L. Phœbus (*Clark*).—Bright dark orange
- In. Picturatum roseum (*Clark*).—Red salmon
- L. Pilot.—Deep rose

- In. Pink Pearl (*Smith*).—Delicate pink, with silver shade, finely incurved
- In. Pink Perfection (*Rundle*).—Lilac. Sometimes called Pink of Perfection, and very similar to Alfred Salter. (See Miss Mary Morgan)
- In. Pio Nono.—Indian, red and gold points
- J. Plantagenet.—Good and showy
- J. Pluie D'Or.—Spiral blooms, medium size, round and very double, large and well-finished petals of a beautiful Jonquil yellow; distinct from all the yellow varieties, and one of the best that exists
- In. Plutus.—Bright gold, incurved Poiteau.—Yellow
- P. Poiteau (*Lem.*)
- P. Polycarp (*Salter*).—Chestnut and orange
- P. Polycarp (*Mee*).—Clear peach-fringed (sent out by Mr. Bull)
- In. Pomona.—Dark orange-fawn
- In. Pompeii (*Clark*).—Cinnamon and orange
- P. Pompon Toulousain.—Red, good and free
- L. Poudre d'Or.—Reddish orange; very early
- Pe. Précocité (*Boucharlet*).—Golden yellow, orange centre. One of the best of its class. Gold Button and Hendersonii are alike, and often are sold as Précocité)
- P. President Decaisne. Rosy carmine, violet scented
- Pa. President Morel.—Red, extra fine
- P. President.—Rosy carmine
- L. Prince Albert (*Wolsey*).—Bright crimson, large and fine
- R. Prince Albert.—Bright crimson brown, good
- In. Prince Alfred (*Davis*).—Splendid rose-crimson; very large
- In. Prince Consort (*Clark*).—Large violet-crimson
- R. Prince De Condé.—Rosy violet
- L. Prince Jerome
- A.l. Prince of Anemones (*Brown*)
- A.l. Prince of Anemones.—Large lilac bluish, and fine high centre
- P. Prince of Orange.—Fine late
- In. Prince of Wales (*Freestone*).—Dark violet-purple, or bright fiery red. Raised in Norfolk by Mr. Freestone, about the year 1835. (See frontispiece to Salter's "Chrysanthemum")
- In. Princess Alexandra (*Smith*).—Delicate lilac bluish
- In. Princess Alice (*Smith*).—Carmine
- In. Princess Beatrice (*Salter*).—Lilac-pink
- In. Princess Imperiale.—Primrose yellow. (See Lord Alcester)
- A.l. Princess Louise.—Large rosy lilac, fine for cutting late, ray florets quilled, forming a full high centre; very fine
- In. Princess Louise of Hesse (*Smith*).—Rose-pink or bluish
- A.l. Princess Marguerite (*Salter*).—Lilac-pink, with lighter centre
- In. Princess Marie.—Rose, incurved
- Princess Mary (*Smith*).—Large pearl white, incurved
- In. Princess of Teck (*Pethers*).—Fine ivory white, good for late blooming
- In. Princess of Wales (*Davis*).—Pearl white, delicately tinted rose-lilac, very large. (Like Mrs. Heales)
- L. Princess Thyra
- L. Princess.—White-lilac
- R. Prince Victor.—Dark red
- P. Priscilla.—Orange, quilled
- R. Progne.—Purple-amaranth or violet-purple. One of the finest in colour, and perfumed like Violets
- J. Progrès Toulousain.—Reddish crimson
- In. Prometheus (*Pethers*).—Bright fiery red-salmon
- P. Proserpine (*Eull*).—Dwarf, yellow
- P. Prospérité (*Lem.*)
- P. Prospero (*Salter*).—Deep purplish violet
- In. Psyche (*Smith*).—Pure yellow
- J. Purple King (*Veitch*).—Recurved petals, purple, shaded with magenta and mauve
- P.e. Purple Lucinda.—Purplish violet
- P. Purple Pompon (*Veitch*)
- J. Purple Prince.—Fine purple-maroon
- Purpurea elegans.—Purple-crimson
- J. Purpureum album (*Salter*).—Rich amaranth-purple, mottled and spotted white; flower-heads of medium size, and not unlike a bunch of purple and white ribbon formed into a loose tassel
- Pygmalion.—Purple-crimson

- Pygmalion (*Smith*).—Red-carmine
- J. Pyramidale (*Bonamy*).—(See Pyramidalis)
- J. Pyramidalis (*Bo.*).—Flowers small and very double; petals quilled, canary yellow, changing to brick red, flowering in pyramids; plant dwarf; colour quite new
- In. Pyron.—Red-chestnut, tipped gold
- A.I. Queen Margaret (*Smith*).—Good rose-lilac, with a double row of ray florets
- P.a. Queen of Anemones (*Bird*).—Rosy red
- In. Queen of England (*Smith*).—Splendid blush coloured
- In. Queen of England White.—Quilled white
- In. Queen of England, Golden.—(See Golden Queen of England), do do. with yellow flowers, immense blooms
- In. Queen of Lilacs (*Smith*).—Rose-lilac
- In. Queen of the Isles (*Smith*).—Pure white
- In. Queen of the Whites.—Large white
- L. Quilled Beauty (*Smith*).—Orange-cinnamon, very double
- L. Quilled Pink.—Rose-lilac
- L. Quilled White.—Pure white
- L. Quintus Curtius.—Salmon and orange
- In. Rabelais.—Carmine and yellow
- In. Ranunculus (*Smith*).—Purple-maroon; of medium size
- In. Raymond.—Golden fawn
- J. R. Ballantine (1882).—Rich carmine-violet, fine and distinct, new shape with broad florets having folded edges
- J. Red Dragon (*Salter*).—Indian or nasturtium - red and bronze shaded
- J. Red Gauntlet (*Major Carey*).—Dark red florets
- J. Red Indian (*Cannell*, 1883) (?)—Indian red (See Inner Temple or Arigena)
- In. Refulgence.—Red purple maroon ("Refulgence" is often mis-called "Refulgens")
- A.I. Regulus.—Cinnamon or bronze
- J. Regina.—Good yellow, late, dwarf, and of strong growth
- P.a. Reine des Anemones.—White
- L. Reine Blanche (*Bouch*).—Pure white (see Reine des Blanches)
- J. Reine des Beautés (*Dél.*).—Bright crimson
- L. Reine des Blanches (*Boucharlet*).—White with a lilac reflex, pure white in greenhouse
- P. Reine des Panachées.—Blush pencilled rose
- P. Reine d'Or (*Dé'auw*).—Perfect little orange buttons, tipped with golden yellow
- L.a. Reine Marguerite.—Anemone, white and rose
- In. Reticulata.—See Reticulatum
- In. Reticulatum.—Good bronzy red
- J. Rêve de Printemps.—Dwarf habit, flowers large and very double, colour deep rich violet-carmine, petals incurving towards the centre, forming a ball of silvery white of great purity, very lasting. The flowers resemble wreaths of China Asters
- In. Reverie.—Very large, in bouquets of four or five flowers, orange, tinted red, with golden centre
- In. Rev. J. Dix (*Davis*).—Orange-red, with a lighter centre
- J. Rex Rubrorum (*Veitch*, 1882).—Crimson-maroon
- J. Richard Larios (*Dél.*).—Fine large-petalled rosy flowers, shaded violet, flamed with white; very distinct in colour
- J. Riche Bouquet.—Dwarf habit, very double and free; ground colour whitish lilac shaded with rose; petals bordered with pure white, golden centre, early variety, extra fine
- In. Rifleman (*Clark*).—Dark ruby
- P. Ringleader (*A. Salter*).—Sent out by *Veitch*, 1882. Flowers subglobose, very compact, pale purple suffused with white. A very distinct and pretty quilled variety
- P. Riquiqui.—Violet-plum
- In. Rival Little Harry (*Rundle*).—Golden yellow, copper coloured
- In. Robert James (*Smith*).—Vivid cinnamon and orange
- L. Rolla (*Smith*).—Purple-lilac and silvery shade
- P. Roquelaure.—Red and orange
- J. Rosa Bonheur.—Bright rose, or violet-rose, very free
- J. Rosa punctata.—See Rosea punctata
- In. Rosa Mystica.—Creamy rose
- P.a. Rose Marguerite.—Rosy Anemone flowers, free and good
- J. Rosea punctata.—White florets, spotted with rose

- R. Rose d'Amour (*Salter*).—Magenta red
- J. Rose Mignonne.—Delicate rose, striped white
- J. Roseo-album (*Salter*).—Amaranth rose, tipped with white
- P. Rose Pompon.—Silver lilac
- P. Rose Trevenna (*Smith*).—Rose, early flowering; very free habit, flowering in wreaths; very useful
- P. Rosetta superba (*Boucharlet*)
- J. Roseum album (*Salter*)
- J. Roseum pictum.—Rose
- J. Roseum superbum (*Veitch* and *Laing*, 1883).—Bright rosy pink
- P. Rosina (*Bull*).—Tender rose, reverse carmine
- P. Rosinante (*Salter*)
- Rotundiflorum (*Payne*).—White petals and tinged peach, centre yellow; pure white in greenhouse
- J. Roux, Mad. (*Laoroix*).—Flower large, with laciniate florets of a soft red colour lined with white
- L. Royal Purple.—Bright purple; fine imbricated flower; centre petals tipped with yellow
- J. Roi Soleil (*Veitch*).—Gold, bright and good
- J. R. T. Biggs.—Dark amaranth
- J. Striata rubra.—Large flower, with petals broader than the preceding, ground colour light gold, completely lined, flamed and streaked with violet and crimson-red. The markings are of great beauty, a real novelty (See *Rubra striata*)
- L. Ruth.—Large golden orange, very full, fine
- L. Sabrina.—Large, blush, changing to cherry
- In. Saccoi Vera (*Clark*).—Large, lilac and rose
- P.e. Saddlington.—Pink and white, early flowering (syn., *St. Crouts*)
- J. Saffrano (*Dixon*, *Hackney*, 1882).—Creamy blush, with pale gold centre; guard florets long and spreading, very distinct and effective (*Jackson*, 1st Class, R.H.S., 1882)
- P. Sagitta.—Blush
- P. Sainte Thais.—Chestnut-orange
- P.e. Salamon.—Dark rose-carmine
- J. Salteri (*Salter*, 1883, *Veitch*).—Bright orange-red, fine distinct var.
- In. Samuel Broome (*Smith*).—Red-cinnamon, with orange centre
- R. Sam Slick (*Smith*).—Ruby, with bronze points
- In. Sam Weller (*Salter*).—Indian red and golden tips
- In. Sanguinea (*Pethers*).—Light red-crimson
- P. Sanguineum (*Sch*).—Pompon of a blood-red colour, tinged with citron in the centre
- J. Sanspareil (*Bo.*)—Flowers small and double; petals quilled, of a beautiful red-madder colour, dotted with bright golden yellow; colour most distinct and new
- P. Sans Souci (*Dél*).—Rosy violet streaked with white
- L. Sappho
- J. Sarnia.—White, pink striped, very large, and distinct variety
- In. Sarnia Glory (*Major Carey*).—Rosy lilac (syn., *Sarnia*)
- P. Satanella (*Hayes*).—Orange-amber
- In. Saumarez (*Smith*).—Bright chestnut-red
- P. Scaramouch Ranunculiform.—White, striped with yellow; perfect
- P.e. Scarlet Gem (*Smith*).—Dwarf; crimson-scarlet profuse; best bedding variety, good for pots and market culture (called also Little Bob and Dr. Bois Duval)
- P.e. Secrétaire Daurel (*Portuques*).—Rosy lilac, sometimes striped with bright rose
- R. Sémiramis (*Lem.*)
- P. Sensation.—Variegated foliage
- In. Seraph (*Smith*).—Sulphur with yellow centre
- J. Sesostria (*Lemoine*).—Flowers double, of a mahogany colour, the centre of flower beautiful golden yellow
- J. Sho - Gakko (*Délaux*).—Pæony formed, lobulated petals, amaranth. (See *Da Jakko* and *Da Gakko*)
- P.e. Sicile (*Pelé*).—Lilac and blush
- P. Sidonia.—See *Sidonie*
- P.a. Sidonie.—Lilac, with high blush centre, full sized
- P. Sienna (*Salter*).—Dark red-orange
- P. Signora Pépin.—Red-carmine and yellow
- P. Silos (*Lebois*).—Bronze-coloured, petals lacinated

- P. Sinbad (*Salter*).—Orange
- In. Sir Beauchamp Seymour.—Broad incurved petals, bronzy red, the reverse paler. Quite a new colour
- In. Sir George Bowyer (*Pethers*).—Dark rose-purple
- J. Sir Isaac Brock (*Major Carey*).—Yellow
- In. Sir H. Havelock.—See Insigne
- P. Sir Richard Wallace (*Lem*).—Rose
- In. Sir Stafford Carey (*Pethers*).—Dark brown-chestnut, with golden points
- P.e. Sistou.—See Nanum
- R. Snowball (*Smith*).—Full flower, very double, pure white; fine for specimens or cut bloom
- P. Snowdrop.—A very pure white Pompon, a sport of very fine form
- P. Snowdrop (*E. J. Lowe*).—Pure white Pompon. Sent out by Cannell. Sometimes known as Cooling's White; exquisite for bouquets and button-holes. Dwarf and of good free habit; may be had in bloom at Christmas under suitable culture; a little gem
- P.e. Snowflake (*Salter*).—Pure white
- P.e. Sœur Melanie.—White, centre yellow, pure white in greenhouse. Very free and pretty like a small Elaine; one of the best
- J. Sol.—Clear citron yellow, petals long and wax-like
- P. Soleil Brilliant (*Délaux*).—Violet, with white centre
- J. Soleil d'Or (*Bo.*).—Flowers enormous and very double; petals long and quilled, of a bright golden yellow with a purple tint; a most exquisite variety
- J. Soleil Levant.—Canary yellow, one of the best late blooming quilled varieties
- J. Source d'Or (*Pertuzes*).—Golden twisted florets, tipped yellow, and shaded and dotted with orange
- J. Souvenir d'Amélie (1882).—Pure white, pounced and shaded with rose-violet; pretty and distinct
- J. Souvenir d'Amsterdam.—Rich brown, or velvety crimson. (1884, *Ware*)
- P. Souvenir de Jersey.—Fine yellow or orange, with fringed edges. If disbudded it is a great beauty for late blooming
- In. Souvenir de Mercedes (*Lacroix*).—Large imbricated, incurved; flower white, tinged with lilac
- P. Souvenir de M. Rampont.—Reddish crimson, good free habit
- J. Souvenir de Reine Marie.—Very double large flower, magnificent rose-violet, enlivened with white, each petal framed by a small silvery white band; very pretty variety
- P.e. Souvenir d'un Ami (*Lebois*).—White, changing to lilac-rose
- In. Souvenir.—Orange-buff, fine, incurved
- P. Souvenir (*Pertuzes*).—Golden yellow, bordered with crimson
- In. Sparkler (*Smith*).—Brassy amber or reddish, tipped bright orange
- J. Splendens.—Chrome-yellow, late
- P.e. Sportsman.—Lilac, shaded white
- L. Staffa (*Salter*)
- In. Stafford.—Rosy purple, incurved
- J. Star.—Large orange-yellow
- In. St. Andrews (*Davis*).—Orange-nankeen
- J. Star.—Yellow and bronze, very late (See also Estella and Salter's Stella)
- In. Stellaris.—See Stellaris globosa
- P. Star of Whyke (*Teesdale*, 1882).—A double Pompon, large and of snowy whiteness; very free and useful for cut bloom or decorative uses in pots (See *Jour. of Hort.* 1883, p. 45, for wood-cut figure)
- In. Stellaris globosa.—Carmine-crimson and white, incurved; a fine show flower
- P.s. St. Brigid.—Snow-white, with a golden centre. It belongs to the single-flowered Pompon class, of which Mr. Teesdale has raised many showy varieties. (See *Florist*, Feb. 1884, pp. 21-22)
- P. Stella (*Salter*).—Golden orange tipped with chestnut. See Estella
- In. Stevens' No. 1.—See George Stevens
- P.e. St. Crouts.—White, tipped pink, (Syn., Pollion Saddington)
- In. St. George (*Clark*).—Golden yellow
- P. Saint Justia (*Hayes*).—Red and orange
- A.l. Saint Margaret (*Pethers*).—Brassy orange
- P.e. St. Mary (*Cannell*).—The best of all the early blooming white Pompons. (Syns., Souvenir d'un Ami (*Ware*), Jardin des Plantes, white Madame Domage)

- P. St. Michael.—Bright yellow, very fine and free, brighter yellow than is even in *Jardine des Plantes*; one of the best for cut bloom
- In. Saint Patrick (*Davis*).—Ruby or bronzy red. (See Beethoven, etc.)
- J. *Striata perfecta*.—Flower very large and double, large petals like *Striata*, from which it is a sport, of a beautiful white, completely flamed and streaked with rose-violet; extra fine
- J. *Striata rubra*.—Fine showy flower (See *Rubra striata*)
- J. *Striatum*.—White, striped with rose
- In. Striped Queen of England (*Downie, Laird, & Laing*).—A sport from Queen, sometimes striped
- P. St. Thais.—Bronze
- R. *Sulphurea superba*.—Clear sulphur yellow
- J. Sultana.—Deep crimson
- J. Sultan.—Brightrosy purple, florets long and quilled
- A.I. Sunflower (*Salter*).—Very large sulphur, golden centre
- P. Sunset (*Hayes*).—Orange and bronze
- L. Superbe.—Tasselled blush
- J. Surprise (*Bo*).—Flowers enormous, petals long and quilled, of comparatively exceptional size, fawn coloured, with a purplish tint, and large yellow centre; quite a new colour
- In. Sydenham.—Carmine-red
- In. Sylphide (*Smith*).—Delicate lilac and blush
- In. Talbot (*Smith*).—Rose-purple, tipped blush
- J. Tasselled Yellow.—Golden yellow
- Temple de Solomon.—Bright yellow
- J. Tendresse (*Dél.*)
- J. The Cossack (*Veitch*).—Chestnut-brown and yellow
- J. The Daimio (*Veitch*).—Large twisted florets, orange and reddish crimson
- J. The Czar (*Major Carey*).—Lemon yellow (see Peter the Great)
- In. The Globe (*Smith*).—Blush (see Globe)
- J. The Khedive (*Major Carey*).—Light purple, shaded lilac (see Khedive)
- P. The Little Gem (*Ingram*).—Peach blush (see P. Little Gem)
- J. The Mikado (*Salter*).—Yellow with crimson tint (see Mikado)
- In. Themis.—Rose (see Anthe mis)
- J. Thérèse Olivier (*Lierval*).—Yolk yellow
- L. Thermos (*Bull*).—Cinnamonbrown, shaded with yellow
- J. The Sultan (*Bull*).—Brilliant purplish rose, reverse lighter (see Sultan)
- P. Thetis.—Clear yellow, double
- J. Thomas Todman (1883).—Pale purple, thread-like florets
- Timour (*Bull*).—Canary-yellow
- J. Thunberg (*Veitch*, 1882).—Very large. Soft primrose-yellow
- J. Tintamarre (*Dél.*).—Creamy white, washed and flamed with violet-carmine, petals frizzed, white behind
- J. Tisiphone.—A large globular flower, petals thread-like, furcate at the extremities, bright orange-red, reverse golden yellow. (Figured in *Garden*)
- P. Tissandier.—Flowers double, convex and imbricated, colour deep rosy violet, tipped with pale yellow
- J. Tokio (*Dél.*).—See To-Kio
- J. To-Kio (*Délaux*).—Dwarf, mahogany velvety purple, reverse golden yellow
- L. Tragédie.—Flowers large, full, imbricated, and of a rosy violet colour
- P.e. Trésorier Lacoste (*Pertuzes*).—Red shaded with orange; fine globular flower
- P. Trevenna.—See Golden, White, and Rose Trevenna
- In. Trilby.—Blush
- In. Trilby Golden.—See Golden Trilby
- J. Triomphe de la rue du Châtelet (*Pert.*).—See Triomphe du Châtelet
- J. Triomphe de Sainte Martin.—Enormous flower, very double, outer petals very long, tubular at the base, but flattened like a spatula at the ends, centre petals shorter, flattened like a Pæony, ground colour silvery shining white, shaded and flamed with rose, violet centre, edged with rose-carmine, unique shape and quite new, a distinct variety from anything that has yet appeared, a most remarkable variety; it is a well-defined step in a new direction

- J. Triomphe du Châtelet (*Pert.*).—Immense size, salmon colour, tinted rose, golden centre, florets twisted corkscrew fashion (see Triomphe de la rue du Châtelet)
- B. Triomphe du Nord.—Large light red-chestnut, early, dwarf and free in habit
- P. Trophée.—See Trophy
- P. Trophy.—Rose mottled, good
- P. Turris Eburnia.—White
- In. Two-coloured Incurved.—Large orange and salmon
- P. Uranie.—Rose-amaranth, pencilled with white, extra fine
- Uranus.—Mottled rose, with light centre
- L. Valeria.—Cinnamon-orange, large; a fine conservatory plant
- Valerie.—See Valeria
- In. Variegated Queen of England.—Blush white, with variegated foliage
- In. Venus Pink or Peach (*Salter*).—Good silvery rose or lilac, affording fine shapely blooms; very free
- In. Venus White (*White*).—See White Venus
- J. Venus (1882).—Violet, reverse of florets silvery white, dwarf and good. Venus is a sport from La Frisure
- L. Vereschagine.—Rose-purple
- In. Versailles Defiance (*Smith*).—Bright rose-lilac
- In. Vesta.—Ivory white, good white, but of tender constitution, and too apt to mildew
- J. Viceroy of Egypt.—Deep rosy crimson, back of florets white, guard florets quilled, centre incurved
- In. Victor Hugo (*Smith*).—Dark brown
- J. Victoria (*Carey*, 1882).—Rose-pink florets, long, and edged with white, forming large showy tassels
- J. Ville de Hyères.—Brownish red in front, backs of florets yellow
- P. Viola Lilac.—See Viola
- P. Viola (*Smith*).—Violet, lilac, or puce, free
- P. Virge Enfantine (*Lebois*).—Very small, snow-white, imbricated, good
- L. Virgile (*Bonamy*).—Golden buff, fine
- P.e. Virginal.—See Virginal
- A.l. Virginal (*J. Salter*, 1870).—Pure white; a very dwarf late-flowering variety, florets finely fringed; well worth culture for Christmas blooming
- P. Virginie Mieliez.—Rose and carmine, very pretty
- P.e. Virginia (*Veitch*).—Best of early white kinds; pure white, free
- In. Virgin Queen (*Smith*).—Pure snow-white
- P. Vulcan.—See also Vulcan and Vulcain
- In. Voltaire.—Syn., Alix, which see
- L. Volunteer (*Salter*)
- P.e. Vicomtesse de Belleville.—Silvery rose, early
- In. Vulcan.—Bright red-crimson
- In. Vulcain.—Bright red-crimson, incurved; a fine show flower
- In. Warden (*Smith*).—Orange
- J. White Aisle.—Fine free blooming white, good and free for market work, or general decorative uses
- White Christine (*Simmonds*).—Creamy white
- White Cockade (*Smith*).—Milk white
- In. White Eve (*Wyness*).—Creamy white. Mr. Wyness, a zealous florist, for many years gardeners to H.M. the Queen at Buckingham Palace, St. James.
- White Globe (*Salter*).—One of the best of whites, giving enormous solid blooms under good culture; creamy white
- P. White Lady.—See Dame Blanche
- In. White Princess.—White
- In. White Queen of England.—A sport of Queen of England, ivory white, incurved, very fine
- J. White Swan.—White, tinted lilac
- P. White Trevenna (*Mount*).—A fine white sport of Rose Trevenna
- In. White Venus.—Good free white; good late bloomer, red, tipped with yellow
- J. William Bull (*Dél.*)
- L. William Edward.—Bright yellow
- J. William Robinson (1883).—Large and fine, cinnamon and gold. (Figured in *Garden*)
- J. Wizard (*Salter*).—Bright reddish maroon, dwarf and free; good loose tasselled flowers
- L. Wonderful (*Clark*).—Large crimson
- L. Yago (*Salter*).—Purple. (See Iago)

J. Yeddo Lilac.—Rose-lilac, with lighter centre	J. Yokohama Orange (<i>Carey</i>).—Good and showy, long petalled flower
P. Yeddo Lilac (1883).—Large, pale lilac-purple	J. Y. Kang Kang (<i>Dé</i>).—Flowers of semi-Japanese form, enormous and double, of a golden yellow washed with lilac; an extraordinary colour
J. Yellow Dragon.—Canary yellow, twisted florets	P. Zyanetta.—Rose-pink
J. Yellow Fringe.—Golden yellow	J. Zelia.—A pink and white Japanese sport of Hero of Magdala
Pe. Yellow Early.—See Golden Madame Domage	In. Zephar.—Salmon-red and yellow (also called Zephyr)
In. Yellow King (<i>Salter</i>).—Large yellow	P.a. Zobedie.—Light rose, very fine
In. Yellow Perfection (<i>Clark</i>).—Golden yellow	

GUERNSEY AND JERSEY SEEDLING CHRYSANTHEMUMS.

The following list contains the names of most of the best varieties of Chrysanthemums raised in the Channel Islands, and is doubly interesting, as the raisers' names are also given:—

Abbé Passaglia (Smith)	Crœsus (Smith)	Grange Lodge Rival (Pethers)
Alarm (Clark)	Daphne (Smith)	Guernsey Nugget (Pethers)
Albert Helyer (Davis)	Diamond	Hackney Holmes (Major Carey) new, 1882
Alma (Clark)	Dido (Smith)	Handel (Smith)
Antonelli (Smith)	Donald Beaton (Smith)	Hercules (Davis)
Apollo (Smith)	Draco (Smith)	Her Majesty (Smith)
Ariadne (Clark)	Dr. Brock (Smith)	Holman Hunt (Smith)
Aspasia (Smith)	Edith Dombrain (Smith)	Iago (Pethers)
Attraction (Smith)	Edwin Landseer (Smith)	Ion (Smith)
Aurea multiflora (Smith)	Elaine (Downton)	Isabella Bott (Pethers)
Aurore Boreale (Pethers)	Emily (Clark)	Isis (Pethers)
Baron Beust (Pethers)	Emperor Nicholas	Japanese Violet (1882)
Beaumont (Major Carey)	Empress Eugénie (Pethers)	Jardin d'Hiver (Clark)
Bella Donna (Smith)	Empress (Smith)	Jewess (Clark)
Bernard Pallsey (Smith)	Ethel	Julia Eogelbach (Smith)
Beverley (Smith)	Eve (Smith)	Julia Grisi (Smith)
Bijou de Guernsey	Fair Maid of Guernsey	King of Denmark (Smith)
Blanche of Castile (Smith)	Fair Rosamond (Smith)	La Belle Blonde (Smith)
Boadicea (Clark)	Faust (Pethers)	Lady Blanche (Smith)
Bob (Smith)	Favourite (Clark)	Lady Carey (Davis)
Bouquet de Fleurs (Clark)	Fingal (Davis)	Lady Hardinge (Clark)
Butterfly (Clark)	Firefly (Smith)	Lady Russell (Smith)
Caddie's Perfection (Caddie)	Florence Nightingale (Smith)	Lady Slade (Smith)
Captivation (Pethers)	Fulgidum (Pethers)	Lalla Rookh (Pethers)
Cardinal Wiseman (Smith)	Garibaldi (Clark)	Leda (Clark)
Carissima (Smith)	General Bainbrigge (Clark)	Little Harry (Smith)
Cherub (Smith)	General Hardinge (Clark)	Little Pet (Smith)
Citronella (Smith)	General Slade (Smith)	Lizzie Holmes (Smith)
Crimson Velvet (Pethers)	Gloria Mundi (Clark)	Lord Clyde (Smith)
	Golden Ball (Smith)	Lord Derby (Clark)

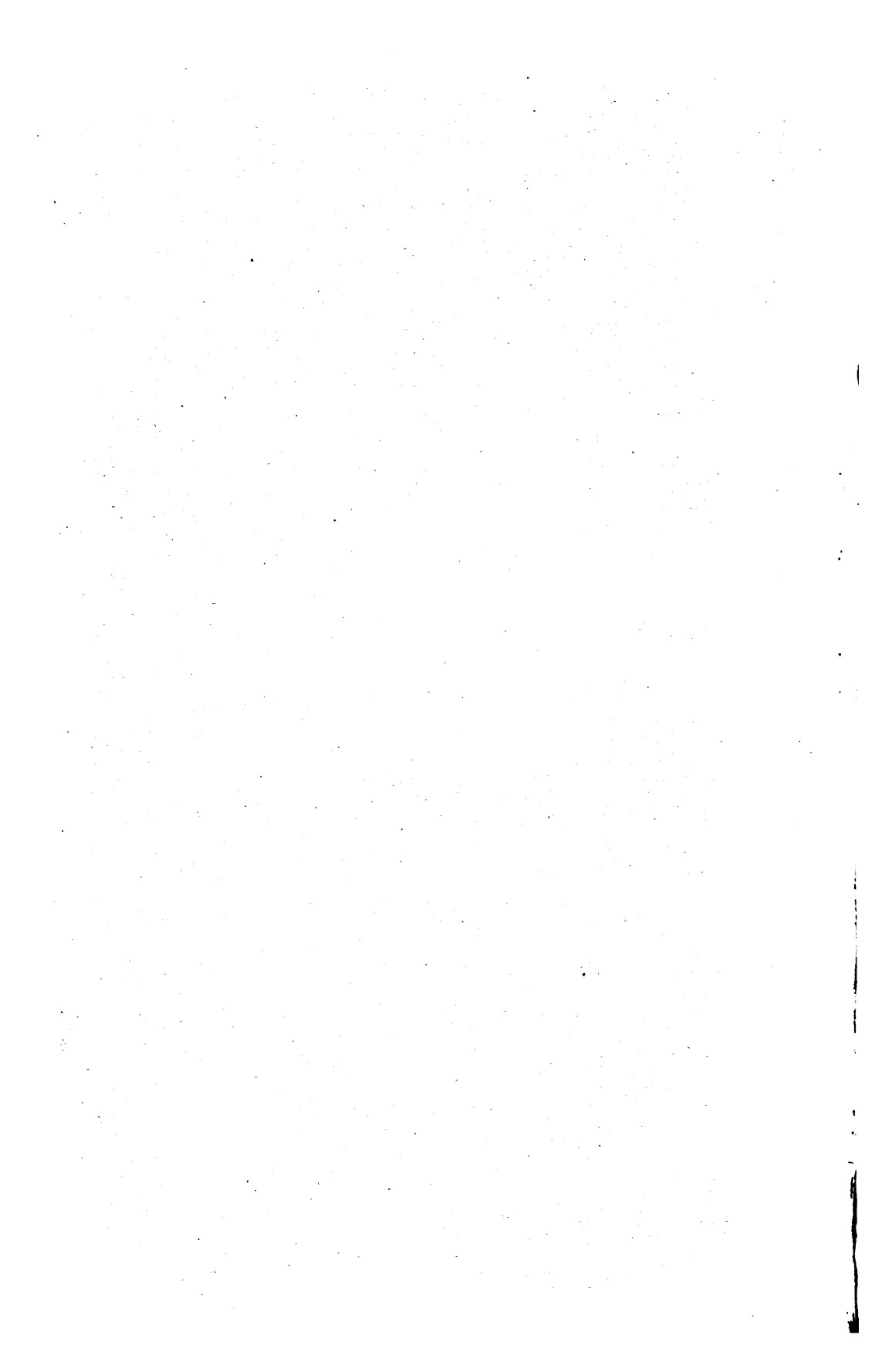
Lord of the Isles (Clark)	Pandora (Smith)	Saint Patrick (Davis)
Lord Palmerston (Smith)	Pelagia (Smith)	Samuel Broome (Smith)
Luna (Smith)	Penelope (Clark)	Sam Slick (Smith)
Luther (Smith)	Peter the Great	Sanguinea (Pethers)
Margaret Vatcher	Picturatum roseum	Sarnia's Glory, or Glory
Mary Lind (Smith)	(Clark)	(Clark)
(Smith)	Pink Pearl (Smith)	Saumarez (Smith)
Miss Eyre (Downton)	Plenipo (Pethers)	Seraph (Smith)
Miss Marechamp	Pompeii (Clark)	Sir George Bowyer
(Pethers)	Prince Albert (Wolsey)	(Pethers)
Miss Slade (Smith)	Prince Alfred (Davis)	Sir Isaac Brook
Monica (Smith)	Prince of Wales (Davis)	Sir Stafford Carey
Mr. Brunlees (Smith)	Princess Alexandra	(Pethers)
Mr. Gladstone (Davis)	(Smith)	Snowball (Smith)
Mr. Wynes (Pethers)	Princess of Wales	Sparkler (Smith)
Mrs. Brunlees (Smith)	(Davis)	Sylphide (Smith)
Mrs. Chas. Carey (1882)	Princess of Teck (Pethers)	Sylvia (Smith)
Mrs. E. Miles (Smith)	Princess Louis of Hesse	Talbot (Smith)
Mrs. Haliburton (Smith)	(Smith)	The Czar
Mrs. Huffington (Pethers)	Prometheus (Pethers)	The Globe (Smith)
Mrs. Kaines (Davis)	Psyche (Smith)	The Khedive
Mrs. Pethers (Pethers)	Queen of Lilacs (Smith)	Victoria (1882)
Mulberry (Downton)	Queen Margaret (Smith)	Victor Hugo (Smith)
Negro Boy (Clark)	Quilled Beauty (Smith)	Viola (Smith)
Nil Desperandum (Smith)	Ranunculus (Smith)	(Downton)
Novelty (Clark)	Red Gauntlet	Virgin Queen (Smith)
Oliver Cromwell (Smith)	Rev. J. Dix (Davis)	Volunteer (Pethers)
Orange Perfection	Rifleman (Clark)	Wonderful (Clark)
(Smith)	Robert James (Smith)	Yellow Perfection (Clark)
Orange Annie Salter,	Saccoi Vera (Clark)	Yokohama
sport (Ozard)	Saint George (Clark)	

SEEDLINGS SENT FROM JERSEY.

Crimson Perfection	Lilac Gem	Model of Perfection
Dick Turpin	Louise	Rose Perfection
Jersey Beauty (Langlois)	Marguerite du Coi	Souvenir de Jersey

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